Contractor's Report to the Board

Comprehensive Assessment of California's Used Oil Program

February 2005

Produced under contract by:

California Polytechnic State University San Luis Obispo, California





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Executive Summary

The Study

The California Oil Recycling Enhancement (CORE) Act¹ addresses the threat to California's environment from improper disposal of used oil. Under its mandate, the California Integrated Waste Management Board (CIWMB) created the Used Oil/Household Hazardous Waste Program (subsequently described as the Used Oil Program or UOP). The CIWMB was charged with establishing local collection programs that encourage the recycling of used oil and decrease the illegal disposal of used oil, to be achieved largely through the provision of annual block grants to local governments.

In October 2002, California Polytechnic State University (Cal Poly) was awarded a contract by the CIWMB to conduct a comprehensive overview and assessment of the UOP's accomplishments and impacts in the 10 years since it was established. The results are intended to assist in the development of a work plan for the UOP, streamlining the oil grant administration process, and providing future options that could be implemented to increase used oil recycling rates.

We (Cal Poly's research team) assessed the UOP at several levels, corresponding to different levels of articulated or assumed goals and objectives. At the first level is the "instrumental objective" of implementing a number of program components required by the CORE Act, including a recycling incentive system, a network of certified collection centers, non-competitive (block) and competitive grants, an information and education system, and a reporting, monitoring, and enforcement program. We considered achieving effectiveness and efficiency in the implementation of these components to be "instrumental," since they are not an end in themselves but rather a means to accomplishing the program objective and, ultimately, the overall goal of the program.

At the second level is the "program objective" which, according to the statute, is that of reducing the illegal disposal of used oil and recycling/reclaiming used oil "to the greatest extent possible" (Public Resources Code [PRC] 48600(f)). At the third level is the "ultimate legislative goal," which, based on the Legislature's stated purpose in the CORE Act, we understood to be the recovery of valuable natural resources and the avoidance of damage to the environment and threats to public health.

We conducted our study by reviewing relevant documents and conducting interviews with a broad range of individuals, including Board members, former and present Used Oil Program staff, others associated with the development of the Used Oil Program (such as former legislative staff), grantees, operators of certified used oil collection centers, officials of other entities (including nonprofit and for-profit corporations) involved in collecting and recycling used oil, staff in other California State agencies, staff in other states' used oil programs, and others generally knowledgeable about pollution issues in California.

It is important to note that while an effort was made to seek input that might be considered reasonably representative, the scope of the project did not allow for statistically significant results to be obtained through the systematic surveying of respondents. In other words, much of the input was anecdotal and, as such, was considered suggestive rather than definitive. For this reason, some of the

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¹ AB 2076, Sher, Chapter 817, Statutes of 1991 (Public Resources Code sections 48600–48691).

recommendations call for further research before significant action is taken to change the program.

The Results

We conclude that, after being in existence for a little more than 10 years, the UOP has succeeded in meeting the *instrumental objectives* specified in the CORE Act. It has:

- Implemented a recycling incentive.
- Set in place a network of certified and non-certified collection centers throughout the state that currently collects millions of gallons of used oil each year.
- Established a statewide used oil recycling outreach and education program.
- Channeled substantial funding to local jurisdictions, nonprofits, and others through a block (non-competitive) grant program and several competitive grant programs.

Despite ongoing efforts to streamline administrative processes, we still heard some criticism from grantees regarding paperwork associated with the grant programs. However, based on our review of the application packages used in the most recent block and competitive grant cycles, we do not believe that they are unreasonably complicated or demanding. Indeed, we believe that, for the most part, the staff has done a good job of minimizing the information required and presenting the materials in a straightforward and understandable manner.

By establishing a used oil collection infrastructure and collecting over 600 million gallons (estimated) of used lubricating oil since 1993, the UOP has made good progress toward the *program objective* of reducing the illegal disposal of used oil and recycling and reclaiming used oil to the greatest extent possible.

The total amount of used oil recycled prior to the UOP's introduction is unknown because it was not measured. However, since 1996, when the UOP began measuring oil recycling, the volume of oil collected annually appears to have been growing steadily. Even though the do-it-yourselfer (DIYer) sector as a proportion of the population (although not as an absolute number) appears to have decreased significantly during the program's existence, the amount of used oil returned by DIYers for recycling appears to have remained steady (if not to have increased). This is significant because of the assumption that DIYers are the people most likely to dispose of used oil illegally. So-called "shade tree mechanics" (individuals, typically unlicensed and unregulated, who change oil for family and friends), small rural growers, and independent truckers in rural areas are aggregated with other DIYers in this context.

What is less sure is the extent to which the UOP has achieved the program's *ultimate legislative goals*, one of which is the conservation of natural resources. While the increase in recycling undoubtedly signifies that we are conserving more than before, at the present time most of the recovered oil is ultimately reprocessed for bunker fuel rather than re-refined oil, even though re-refining is generally acknowledged to be more conserving and less of a risk to public health and the environment.

Most difficult to assess is the degree to which the program has succeeded in avoiding damage to the environment and threats to public health by reducing illegal disposal. The reality, it seems, is that nobody knows for certain how much, if any, environmental or health damage illegal oil disposal caused before the UOP was established, nor how much damage it has created since. Given the nature of used oil and the quantities unaccounted

for, there is certainly reason to suppose that illegal oil disposal poses serious risks, but our knowledge base in this area is very incomplete.

In general, it appears that the quantities of oil per capita collected annually from DIYers in four states (Florida, Maryland, Utah, and California) are of the same order of magnitude. But how each state calculates and defines its data varies enough to make precise comparisons difficult. All four states have well-established used oil programs, and two collect (and spend) revenues based on fees levied on oil sales. However, California stands out in regard to the amount of money dedicated to used oil management. A critical distinction, however, is that California regulates used oil as a hazardous waste, which makes it more difficult to persuade businesses to accept used oil from the public. This poses a challenge to the UOP, since it means that the handling of used oil is significantly more costly and carries more liability.

Within the UOP itself, the staff appears to have worked hard to implement the provisions of the CORE Act. Several grantees, for example, went out of their way to praise the staff's helpfulness in assisting areas such as grant applications and reporting. In the absence of a strategic plan for the program (in which objectives, assumptions, and other issues might have been laid out more explicitly), the staff has focused on achieving the instrumental objectives, most notably the objective of channeling funds to local jurisdictions. More than one interviewee, among former and present staff, referred to the importance placed on "getting the money out." This implies acceptance of the assumption that the localities are best placed to design and implement their own used oil diversion and recycling efforts. A consequence of this focus on instrumental objectives is that the UOP has become more bureaucratic in its functioning with an increased administrative workload, and a decreased one-on-one interaction with constituents.

The recycling incentive, a major feature of the program, gets mixed reviews. On the one hand, it is generally acknowledged (and a study by another contractor [San Francisco State University, 2002] has tended to confirm) that the level of the incentive is too low for it to motivate most members of the public, including DIYers, to change their behavior from illegally dumping to recycling used oil. Apparently, most do not even bother to ask for the 16 cents per gallon incentive payment, though they are entitled to do so. Instead, a substantial amount of total claims money appears to end up in the hands of fast-lube operators who collect very little DIYer oil.

On the other hand, expenditures for recycling claims constitute a small percentage of the total Used Oil Fund revenue collected from oil manufacturers. Most of this revenue has been spent (as intended) on developing used oil collection programs such as used oil grants and statewide outreach and education.

Given all of the above, the question is, "Where do we go from here?" Even without definitive evidence of damage to public health and the environment, it is clear that recycling oil conserves this important natural resource, and improperly disposed used oil is an issue that needs to be addressed. As previously mentioned, other states have recognized this (as has the federal government) and many have implemented their own used oil programs.

If the recycling of used oil and the prevention of illegal dumping of used oil are to continue, it is essential to maintain an adequate infrastructure. Without continued grant funds, it is unlikely that local governments would continue to give this program its present priority and might abandon their efforts in this area altogether.

However, our broadest recommendation is that the UOP refocus on the ultimate legislative goals that the California Legislature had in mind when it passed the CORE Act, and systematically consider how they might most effectively be achieved. A vehicle for doing this would be a well-conceived strategic planning effort. We hope that the findings and recommendations contained in the present report would feed directly into such a planning effort, which would consider such options as:

- Continuing to broaden the oil recycling focus beyond DIYers, to give greater attention to generators of used oil in the agriculture, marine operations, and other potential sectors.
- Aggressively promoting program improvements to grantees rather than focusing on
 "getting the money out" to localities. More attention should be paid to the quality of
 the programs funded. (This is not meant in an administrative/bureaucratic sense, such
 as pre-approving more expenditures, but rather in terms of activities such as sharing
 information and materials and providing technical assistance regarding best
 practices.)
- Becoming more systematic about, and devoting more resources to, statewide outreach and education.
- Increasing the attention given to reducing the rate of generation of used oil in addition to promoting its recycling.
- Considering modification, or even elimination, of the recycling incentive (paying
 particular attention to whether it is desirable to continue paying the incentive to fastlube and auto repair businesses, while ensuring that auto parts stores have an
 adequate incentive, financial or otherwise, to remain in the network of certified
 collection centers).

A detailed set of recommendations is contained in the report.

Introduction

The Study

In 1991, the California State Legislature passed the California Oil Recycling Enhancement (CORE) Act (PRC sections 48600–48691) to address the threat to California's environment from improper disposal of used oil. The California Integrated Waste Management Board (CIWMB) was charged with overseeing the implementation of the act, thus creating the Used Oil/Household Hazardous Waste Program (Used Oil Program [UOP]/HHW). The goal and mission of the program are to decrease the illegal disposal of used oil and increase the statewide recycling rate of used oil.

In October 2002, California Polytechnic State University (Cal Poly) was awarded a contract by the CIWMB to conduct a comprehensive overview and assessment of the Used Oil Program's accomplishments and impacts in the 10 years since it was established. The results are intended to assist in the development of a work-plan for the Used Oil Program, streamline the oil grant administration process, and provide future options that could be implemented to increase used oil recycling rates.

Methodology

In undertaking each of the tasks listed in the scope of work for the contract, we gathered information by:

- Identifying and reviewing, to the extent feasible, all available, relevant written documents (such as statutes, regulations, policy statements, planning documents, grant application packets, forms, audit reports, and research literature) obtained both online and in hard copy from the Used Oil Program office and other sources within and outside California.
- Identifying appropriate persons to interview, including Board members (3), former and present CIWMB staff (24), a former legislative staff person associated with the development of the Used Oil Program (1), grantees (12), operators of certified and non-certified used oil collection centers (9), officials of other entities (including nonprofit and for-profit corporations) involved in collecting and recycling used oil (9), staff in other California State agencies (9), staff in other states' used oil programs (8), and others knowledgeable about used oil issues in California and elsewhere (5).
- Conducting interviews utilizing various means of communication (e-mail, phone, and face-to-face).

The study proceeded in an iterative fashion, as successive contacts typically supplied new leads for us to follow.

Once obtained, information was analyzed initially by the team member(s) designated as lead(s) for the respective task in the scope of work. The information and initial analysis in each case were then reviewed by the full team. Subsequently, both individual team members and the full team proposed findings and recommendations that were considered for inclusion in a preliminary draft final report. Following reviews of successive drafts by the Used Oil Program staff, it fell largely to the project director to make final revisions (since several of the team members, formerly graduate students, had by now completed their studies and left Cal Poly).

Given the breadth of the study and limitations on time and resources, the team could not conduct a detailed, rigorously scientific investigation of every item uncovered. In many instances, what they found out was suggestive of an issue and/or a possible solution, but not necessarily definitive. For this reason, some of the recommendations call for further research before significant change is made in program parameters.

Organization of Report

For brevity, the main report contains only: (1) a summary description of California's Used Oil Program (including its authorizing statute and information about its implementation); (2) a presentation of findings, analysis, and recommendations, and (3) a summary of principal conclusions and recommendations. Additional descriptive information, including tables comparing selected programs in California and elsewhere, is provided in the appendices, which also include a matrix linking the contents of the entire document to the individual deliverables listed in the scope of work.

Summary Description of California's Used Oil Program

Introduction

California's used oil program became effective on January 1, 1992, as a result of the California Oil Recycling Enhancement (CORE) Act, based on the legislative findings that the illegal disposal of used oil poses a significant threat to California, that used oil represents a "valuable state resource," and that the problem posed by used oil disposal requires a "comprehensive, statewide response." (PRC section 48600) The CORE Act stated that "on or before October 1, 1992, the state shall adopt a used oil recycling program which promotes and develops alternatives to the illegal disposal of used oil" (PRC section 48630).

Major Provisions of the Legislation (as Amended)²

Intent

The intent of the CORE Act is "to reduce the illegal disposal of used oil and recycle and reclaim used oil to the greatest extent possible in order to recover valuable natural resources and to avoid damage to the environment and threats to public health" (PRC section 48600).

Used Oil Recycling Fund

Oil manufacturers are required to pay the Board four cents for every quart of lubricating oil sold, transferred, or imported for use in California. Revenues are deposited in the California Used Oil Recycling Fund and are used:

- To pay a recycling incentive, set by the Board at no less than four cents per quart, to
 every small quantity industrial generator, curbside collection program, and certified
 used oil collection center, for used lubricating oil collected from the public, or
 generated by the certified used oil collection center or the small-quantity industrial
 generator, and transported by a used oil hauler to a certified used oil recycling,
 storage, or transfer facility (PRC section 48651).
- To establish an annual reserve, to pay for Board administration of the program, and to pay for the reporting and inspection of used oil haulers and facilities by the Department of Toxic Substances Control (DTSC) (PRC section 48653).
- To make annual block grant awards to local jurisdictions on a per capita basis for the development and support of local used oil collection programs. A participating local government must have either (1) a certified collection center for every 100,000 residents not currently served by curbside used oil collection, with operating hours as per statutory guidelines on operating hours, or (2) curbside collection at least once a month (PRC section 48691).
- To provide appropriations for statewide outreach, competitive grants, and other purposes.

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² This section does not provide an exhaustive summary of the CORE Act's provisions

Certified Used Oil Collection Centers

The Core Act provides for the establishment of certified used oil collection centers (PRC section 48660).

No certified used oil collection center can receive used oil recycling incentive payments until the Board has certified that the center is in compliance with specific guidelines for operating hours. Each center must reapply for certification every two years, and the Board can revoke its certification if it finds the center is not in compliance with statutory guidelines.

A certified center must be prepared to pay a recycling incentive of four cents per quart to any person who brings used lubricating oil to the center in containers. However, an individual may donate used oil to the certified center, or the center may offer the person a credit of at least twice the recycling incentive that may be applied toward the purchase of goods or services offered by the center.

Used Oil Filters

The CORE Act authorized the Board to establish a pilot program for recycling used oil filters (PRC section 48695), but this provision was repealed in 2003.

Stormwater Runoff

California's code relating to used oil was amended in 2001 to authorize local governments with established used oil collection programs to also provide for the mitigation and collection of oil and oil by-products from stormwater runoff, through the use of specified devices. Mitigation/collection methods must remove oil from stormwater before it enters waterways and be consistent with the respective local jurisdiction's approved stormwater management plan. Provision was made for the continuous appropriation of funds from the California Used Oil Recycling Fund to address oil in stormwater runoff.

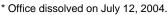
The CIWMB may issue grants to any entity for education and mitigation projects relating to stormwater pollution from used oil and oil by-products, including, but not limited to, use of storm drain inlet filter devices (PRC section 48632(c).

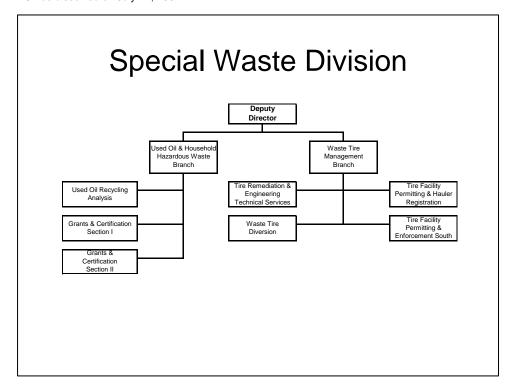
Implementation of Used Oil Program

Organization

The Used Oil Program (UOP) was assigned to the CIWMB, which is part of the California Environmental Protection Agency (Cal/EPA). The program has seen several reorganizations since its beginnings, with major changes in 1995 and 1999. The program now resides in the Special Waste Division (together with waste tire management). It consists of two grants sections, which also oversee the certification of collection centers, and a used oil recycling analysis section. All used oil grants are currently managed within the division. Organizational charts for the CIWMB and the Special Waste Division are below.

CIWMB Board Members Advisors Executive Director Chief Deputy Office of Policy and Legislative Affairs Office Public Affairs Office Legal Office Education and Office* the Environment Diversion, Waste Prevention Permitting Administration Planning, and Special Waste and Market And Finance Local Enforcement Division Development Division Assistance Division Division Division





Program Development

In order to meet the statutory deadline, the initial development of the UOP was based on an existing program in another State agency, the Department of Conservation's bottle and can program. This was thought to be a suitable model since it also collected a fee, had collection centers, and offered a recycling incentive. In mid-1992, the UOP submitted regulations on reporting to the Office of Administrative Law, followed in October 1992 by regulations on facility certification and industry reporting.

In early 1993, the staff distributed applications for the certification of used oil collection centers. After completed applications had been assessed, certified center inspections

began in May 1993. At this time, UOP certification unit staff dedicated a considerable amount of travel time to connecting with potential grantees and oil-related businesses.³ The reason for the travel was to disseminate information about the UOP across the state and convince local jurisdictions about the need for public recycling of used oil. In June 1994, CIWMB awarded the first used oil block grants to local governments to set up used oil collection programs, and by the end of that summer over \$14.5 million in 162 one-year block grants had been distributed to local jurisdictions throughout the state. In that same year, over \$8 million in opportunity grants (used for providing opportunities in addition to those supported by block grants) were awarded. Those early grant funds were often used for outreach purposes, that is, to inform the public about the new certified collection centers and used oil recycling opportunities.

In 1998, revised oil collection regulations were drafted. However, due in part to a change in leadership in the UOP, the revised regulations were never submitted for formal adoption by the Board, and the original regulations still remain in effect.

Certified Used Oil Collection Centers

According to a recent study, since 1999 the number of certified used oil collection centers (CCC) has stabilized at around 2,600, (*Analysis of Certified Collection Centers*, n.d., prepared in 2004, p. 1) although about 3,100 service stations, auto parts stores, and fastlube operations had previously been recruited to perform this function. Following initial certification, centers must reapply for certification every two years. The responsibilities of collection center operators are to:

- Accept used oil from the public at no charge and verbally offer the 16-cents-pergallon recycling incentive.
- Display, easily seen from a public street, the "CIWMB Certified Used Oil Collection Center" sign.
- Accept no more than 55 gallons per person, per shipment, in a container no larger than 55 gallons. Until 2002, the limit was 20 gallons per person, per shipment. Certified collection centers may set lower limits to suit their oil collection capacity, provided the limit is no less than 5 gallons per person, per day.
- Refer persons with contaminated oil to the local environmental health or public works office for referral to safe disposal locations.
- Maintain written procedures telling employees how to prevent the acceptance of contaminated used oil.
- Advertise at least once every six months via general media that the center accepts
 used oil at no charge and offers payment of the recycling incentive. Advertising may
 be conducted either by the center, corporate headquarters, or local government.
- Keep the certificate, or with Board approval, a copy of the certificate on-site.
- Operate in accordance with all federal, state, and local used oil management laws and regulations.

³ At that time, one section in the Used Oil and Household Hazardous Waste Branch was dedicated to the CCC program, with another section dedicated to grants. Currently, two sections are dedicated to both grants and CCCs.

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 Maintain records pertaining to used oil collection for at least three years and provide Board staff access to these records.

Grant Programs

The Used Oil Program awards both non-competitive and competitive grants.

The non-competitive grants, known as *block grants*, are awarded on a largely per-capita basis (with an enhancement to reflect minimum levels of funding needed by small and rural jurisdictions). These grants help local governments establish or enhance permanent, sustainable used oil recycling programs involving, for example, used oil and filter collection.

The competitive grants include:

- Opportunity grants: Provide additional funding to local governments to augment or expand oil collection and outreach/education programs established by the block grants.
- **Nonprofit grants:** Awarded to nonprofit organizations for used oil and used oil filter recycling projects.
- Research, testing, and demonstration grants: Awarded to any entity pursuing research, testing, and demonstration projects for collection technologies. For developing uses for products resulting from the recycling of used oil, as well as for "education and mitigation projects relating to stormwater pollution from used oil and oil by-products, including, but not limited to, use of storm drain inlet filter devices" (PRC section 48632). The funding levels for these competitive grants are dictated by statute relative to the total amount of funds in the Used Oil Fund (PRC section 48656).

Grants Administration

The flow of primary activities associated with administering block and competitive grants varies somewhat from one cycle to another, but is roughly described in the following table:

Table 1: CIWMB Grant Administration Process

Block Grants	Competitive Grants
Designate cycle lead.	Designate cycle lead.
Develop timeline and divide up tasks.	Develop timeline and divide up tasks.
In consultative process, make revisions to the grant application, policy, procedures, tasks, budgets, etc.	In consultative and iterative process, develop draft and final program criteria that will increase the recycling of used oil/filters. Submit agenda item for approval by Board.
	Select preliminary grant review teams and team chairs.
Meet with Used Oil Recycling Analysis unit supervisor and budget office to determine funding availability.	Work with Used Oil Recycling Analysis unit supervisor and budget office to determine funding availability.

Block Grants	Competitive Grants					
Develop and post the Notification of Funding Availability (NOFA) on CIWMB website.	Develop and post the NOFA on CIWMB website.					
	Develop mailing list and send out NOFA.					
Use population numbers to establish size of used oil and used filter grants by jurisdiction, taking into account minimums for small cities and counties.						
Develop final grant application. Develop draft procedures and requirements, terms, and conditions.	Develop grant application and, following review, post on CIWMB website. Develop draft procedures and requirements, terms, and conditions to include with application packet.					
Develop mailing list and send one-page applications to all eligible jurisdictions.	Question and answer period for the public.					
Following receipt of applications by Grants Administration Unit (GAU) with accompanying materials, GAU enters information into Grants Management System (GMS) database.	Following receipt of applications by Grants Administration Unit with accompanying materials, GAU enters information into Grants Management System database.					
	Prepare grant review instructions and folders for teams, as well as benchmark applications.					
	Provide benchmark orientation for review team members and conduct independent review of all applications.					
	Enter scores into database, as well as comments for private sector applicants.					
Develop grant award recommendations.	Develop grant award recommendations based on ranking applications according to score. Of those receiving a passing score (70 percent), the highest ranked receives funds first, then the second highest ranked, and so on, until funds are all allocated.					
Check on applicants who owe the Board money or have not yet submitted last annual report.	Check on applicants who owe the Board money.					
Finalize funding list.	Finalize list of applicants to be recommended to the Board for funding.					
	Prepare and distribute faxes to applicants, informing them of recommendations to Board.					
Prepare memo for Executive Director to send awarding grants.	Prepare, have reviewed, and present agenda item to the Board for granting of awards.					
	Prepare and distribute faxes to applicants, informing them of Board decisions.					
Prepare grant files, including documents such as agreement and terms and conditions.	Prepare grant files, including documents such as agreement and terms and conditions.					
Mail package to grantees.	Mail packages to grantees.					
Receive signed agreements from grantees within 90 days (reminder sent after 45 days).	Receive signed agreements from grantees within 90 days (reminder sent after 45 days).					

Block Grants	Competitive Grants
Monitor for compliance with terms, conditions, and other grant stipulations.	Monitor for compliance with terms, conditions, and other grant stipulations.
Provide technical assistance to grantees.	Provide technical assistance to grantees.
Review annual reports; Enter all data in Grants Management System database.	Review reports and deliverables and process requests for payments. Enter all data in Grants Management System database.
Verify that all funds earned from interest have been spent on approved grant expenditures.	
Fill out checklist to ensure all details have been completed and entered into database.	Fill out checklist to ensure all details have been completed and entered into database.
After approval of last annual report, release the 10 percent retention based on the Expenditure Itemization Summary.	After approval of last annual report, release the 10 percent retention based on the Expenditure Itemization Summary.
Students enter into spreadsheet information from annual reports about gallons of oil and number of filters collected.	Complete summary of grant successes and challenges as well as qualitative data relating to oil recycling.

Scoring Process for Competitive Grants

Applications for competitive grants are scored by review teams, consisting of staff from the Used Oil Program and the Grants Administration Unit (GAU). The scoring is based on "general review criteria," which are broadly similar for all types of competitive grants, and "program criteria," which are specific to each individual grant cycle. These criteria give the UOP an opportunity to expend funds on grant activities that reflect its priorities at the time, as approved by the Board.

General Review Criteria (around 80–85 percent of total points)

- 1. Need
- 2. Goals and Objectives
- 3. Work plan
- 4. Evaluation
- 5. Budget
- 6. Application completeness, letters of support, experience
- 7. Evidence of recycled content purchasing policy or directive

Program Criteria (around 15-20 percent of total points)

Examples of program criteria used in recent cycles are as follows:

6th Opportunity Grant Cycle

- 1. Curbside, agricultural, or marina oil collection.
- 2. Did not receive an opportunity grant in last cycle.
- 3. Targets non-English-speaking or underserved populations.

5th Nonprofit Grant Cycle

- 1. Uses social marketing techniques.
- 2. Targets an underserved population.
- 3. Agricultural and marina oil collection and/or stormwater oil mitigation.
- 4. Promotes the purchase of re-refined oil and the sustained availability of re-refined oil.
- 5. Did not receive a nonprofit grant in last cycle.

3rd Research, Testing, and Demonstration Grant Cycle

- 1. Matching funds.
- 2. Collaboration with public institution.
- 3. Priority program criteria:
 - a. Project develops a technique, process, market, or product not already available in California, which utilizes re-refined motor oil.
 - b. Project involves an independent third-party technology evaluation of storm drain inlet filter devices designed to mitigate stormwater pollution from used oil.
 - c. Project furthers the development and effectiveness of equipment designed to recover oil from oily water.
 - d. Project proposes to develop a cost-effective field test kit for use in identifying polychlorinated biphenyls (PCB) in used motor oil.
 - e. Project proposes to develop a strategy and establish a pilot program for collecting used oil from independent truckers.

Outreach and Education

Responsibility for outreach and education has been shared between the UOP and individual grantees, with the bulk of the effort implemented by the latter. In addition to using block grant funds for outreach and education activities, nonprofit grants and research, testing, and demonstration grants have funded statewide outreach activities, such as promotional events at racetracks. Over the years, the Board has also worked with contractors in statewide outreach, for example to develop educational curricula that are utilized statewide. The UOP currently maintains both a physical and web-based library of outreach and educational materials that grantees and contractors have developed using CIWMB funding.

Contracts

Each fiscal year, after administrative, claims reimbursement, statewide education/outreach, and grant program dollars have been budgeted, UOP allocates remaining funds for special contracts. These special contract dollars have funded projects that provide data for local governments to use in order to increase used oil/filter recycling. Contracts are also used to conduct controlled pilot studies that test new methods of outreach (which can take up to three years), to conduct internal program reviews, and to support efforts to address priorities as deemed necessary by the Board. Some examples are below:

• From 1997–2002, the UOP contracted with the California Conservation Corps to provide used oil recycling education and outreach materials in various parts of the state to K–12 students. As part of the contract, the California Conservation Corps also stenciled community storm drains with warnings not to dump used oil down storm drains.

- In 2000, a contract was awarded to Shasta Community College for the development
 of educational materials for community college and high school students on proper
 automotive waste management (including waste reduction). The project resulted in a
 package of publications, including a resource manual, an instructor's guide, and a
 student workbook. The management of used oil is one of the topics given in-depth
 coverage.
- In 2001, the San Francisco State University Public Research Institute conducted survey research and analysis to determine the proportion of DIYers in California and their oil disposal attitudes and behavior.
- Currently, researchers at the California State University, San Marcos, are conducting a community-based social marketing pilot to (1) determine the barriers to used oil disposal in three California communities and (2) test alternative marketing methods to overcome the barriers and increase used oil recycling participation in those areas.

Grade School Education

UOP funds were used in the development of two major curricular packages published by the CIWMB: (1) *Closing the Loop: Exploring Integrated Waste Management and Resource Conservation*, intended for grades K–6, which devotes only a short section specifically to "motor oil" and (2) *Earth Resources – A Case Study: Oil*, intended for grades 6–12, which gives considerable attention to used oil. For several years, UOP funds also supported the distribution of these curricula and teacher training workshops by staff of the current CIWMB Office of Education and the Environment (OEE). OEE is currently using UOP monies to partially fund the Environmental Ambassador Pilot Program. This program identifies and recognizes schools or districts having programs or projects that facilitate the use of environmental education as a means to environmental action.

UOP funds also help support a unique partnership between the Walt Disney Company and the California Environmental Education Interagency Network (a California State government consortium of environmental educators): Jiminy Cricket's Environmentality Challenge. This project for fifth-grade classes in California allows students to pledge to do three things to help the environment and also to participate in a competitive class project targeting an environmental issue. The class that wins the grand prize receives a trip to Disneyland Resort. As a result of supporting the Environmentality Challenge, UOP has expanded its school outreach efforts by distributing sample lessons on used oil recycling to teachers of over 100,000 students who participate each year in the challenge.

Findings, Analysis, and Recommendations

Introduction

In any program assessment, a key issue is the choice of assessment criteria—the goals and objectives against which the program is to be assessed. Put another way, it is essential to specify what constitutes a program's "success" and, furthermore, to establish a measure by which such success can be gauged. In the case of California's Used Oil Program, the CORE Act supplies the ultimate goals but fails to define precisely how the program's success is to be measured. We might expect to find further elaboration of the program's goals and objectives in a strategic plan, but none has been formally adopted at the branch or division level. (Although the Board has adopted a succession of strategic plans for the agency as a whole, there is no mention of liquid waste or used oil management in these plans).⁴

Under these circumstances, we have assessed California's Used Oil Program at several levels, corresponding to different criteria (articulated or assumed goals and objectives).

Table 2: Used Oil Program Criteria

Level	Criterion
First	Instrumental objective
Second	Program objective
Third	Ultimate legislative goal

Instrumental objective: The UOP staff is charged with implementing the CORE Act, which explicitly provides for a number of program components, including:

- A recycling incentive system.
- A network of certified collection centers.
- Grants.

• The development and implementation of an information and education system.

• A reporting, monitoring, and enforcement program.

Achieving effectiveness and efficiency in implementing these components is considered an instrumental objective, since they are not an end in themselves but rather a means to accomplishing the program objective and, ultimately, the overall goal of the program.

Program objective: According to the CORE Act, the used oil recycling program is intended to "reduce the illegal disposal of used oil and recycle and reclaim used oil to the greatest extent possible." (PRC section 48600 (f)) More specifically, the program is to promote and develop alternatives to the illegal disposal of used oil, including local used oil collection programs and other components of a comprehensive system for used oil collection and recycling.

⁴ A draft strategic plan was prepared for the UOP around 1996–98 but was never formally adopted, in part because of a change in program leadership.

Ultimate legislative goal: The Legislature's stated purpose in passing the CORE Act was "to recover valuable natural resources and to avoid damage to the environment and threats to public health." (PRC section 48600(f))

Before reporting on the results of our assessments at each of these three levels, we present findings from a sub-component of our study.

Findings From Comparing UOP With Selected Programs in California and Elsewhere

In accordance with the scope of work, we made comparisons between California's Used Oil Program and: (1) grant programs offered by other California State agencies, (2) public outreach campaigns conducted by other California State agencies, and (3) used oil recycling programs operated by other states. The purpose was to identify "best practices" that might be transferable to the UOP.

Appendix A includes more information about our findings, together with tables summarizing important characteristics of the comparison programs. In conducting our study, we realized quickly that many complex factors affect the manner in which the programs were initially designed and subsequently evolved (as is true also of the UOP). Since we had limited time to examine in detail each program's procedures and outcomes, we believe that our findings and conclusions regarding "best practices," presented below, should be treated as suggestive rather than definitive. (We could not, for example, independently assess each program's effectiveness in achieving its stated goals.)

Other State Agencies in California

Grant Programs

Using the screening process Appendix A describes, we chose to study the following grant programs:

Table 3: Grant Programs Studied

Agency	Grant Program(s) Studied				
Coastal Conservancy (CC)	Competitive Grants				
Department of Conservation (DOC)	City/County Annual Payment Program				
	Competitive Grant Program ⁵				
	Local Community Conservation Corps				
State Water Resources Control Board (SWRCB)	Clean Beach Initiative				
Department of Parks & Recreation (DPR)	Per Capita Bond Act Program				
	Riparian and Riverine Grant Program				
California Integrated Waste Management	Used Oil Block Grants				
Board (CIWMB)	Used Oil Competitive Grants				

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⁵ Now called Community Outreach Grant Program.

Findings are as follows:

- With the exception of the Coastal Conservancy, the agencies that we examined do not have a separate grants administration unit, as is found in CIWMB. However, we did not obtain sufficient evidence to determine whether having or not having such a unit constitutes a best practice. Advantages and disadvantages seem to exist for either way. For example, having a separate grants administration unit relieves program staff members of some administrative chores, allowing them to focus more on achieving program objectives, and it is likely to ensure greater consistency in the administration of different grant programs within an agency. On the other hand, it results in grantees having to deal with two units instead of one, which can pose a problem if the units fail to operate in a fully coordinated manner.
- It is unlikely to be considered a "best practice" to assign such large numbers of grants (around 80)⁶ to each manager. In this regard, however, the UOP seems to be in line with some of the other programs (specifically, DOC's beverage container recycling programs and those run by DPR).
- All of the programs provide assistance to grantees in various ways, such as through the web, by phone, and through workshops. We did not identify any particular "best practice" in this area.
- The UOP block grant program compares to the DOC's City/County Payment Program (in support of beverage container recycling) in using a very brief (two-page) application form. Similarly, UOP's competitive programs resemble most other competitive programs in requiring more extensive information in the application packet. A possible best practice, used by the State Water Resource Control Board's Clean Beaches Initiative, is that of screening applicants initially via a one-page form, with additional information and accompanying material sought only from applicants who are placed on a "priority list."
- The DOC's beverage container recycling programs require a new authorizing resolution from a grantee's governing board only when the information contained on the existing resolution is no longer valid, whereas the UOP's programs specify five years as the maximum period during which a resolution may remain in effect. When interviewed, a senior member of the DOC staff said that he was unaware of any past abuse in his agency's grant programs. We believe that DOC's policy regarding authorizing resolutions qualifies as a best practice.
- Reporting requirements vary among the different programs. Among agencies offering
 block grants, DPR requires only financial reports, whereas DOC requires a brief
 project evaluation at the end of the grant cycle. This evaluation is essentially
 equivalent (in terms of reporting interval) to the annual report required by the UOP.
 Most agencies offering competitive grants require quarterly reports, although the
 Coastal Conservancy seeks them monthly; the UOP requires annual progress reports
 and a final report for the three-year grant term.
- Despite the fact that all State agencies are supposed to require certification of recycled-content products, only the UOP appears to enforce this requirement.

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⁶ This number assumes that each block grant cycle constitutes a separate grant.

- Similarly, although all State agencies are supposed to have a requirement for reporting any interest accumulated when funds are provided in advance, neither the Coastal Conservancy nor DOC appears to enforce this requirement. CIWMB and DPR do.
- Most of the programs, including DOC's competitive programs and all of the UOP's programs, withhold 10 percent of each grant payment until project completion.
 DOC's City/County Payment Program is unusual in that all funds are disbursed up front with no withholding; furthermore DOC has no mechanism to recover unspent funds, for which an adjustment is made only if/when the grantee applies for another award. We believe that this is not a best practice.
- The Coastal Conservancy expects its managers to write brief project evaluations, and it withholds reimbursement when grantees fail to fulfill expectations. This has the potential of being a best practice, although we do not know enough about how it actually works. We did not receive information about whether and how the other three comparison agencies seek to penalize inadequate performance.

In summary the UOP, which functions with a separate grants administration unit, tends to impose more administrative requirements, such as interest-tracking and recycled-content certification (RCP), than the comparison State grant programs. Additionally, with respect to the number of grants assigned to each staff member, the UOP operates at the higher end of the range. The UOP might benefit in streamlining its processes by looking at DOC's policies on such items as resolution submission, as well as SWRCB's application process.

Public Outreach Campaigns

We studied the following campaigns:

Table 4: Public Outreach Campaigns Studied

Agency	Campaign
California Integrated Waste Management Board (CIWMB)	Used oil recycling
Department of Conservation (DOC)	Bottle-can recycling
Department of Consumer Affairs (DCA)	Energy conservation
Department of Health Services (DHS)	Tobacco control
Office of Traffic Safety (OTS)	Seatbelt awareness

DOC and DHS employ an approach they describe as "social marketing," which "aims
to create behavioral and attitudinal change that stems from a desire to do something
because it's the right thing to do, rather than from a desire for personal gain." (Dept.
of Conservation RFP 4002-513 Q&A's). They use education, communication,
prompts, social norms, incentives, and removal of social barriers to encourage and
reward desired behavior, such as the recycling of beverage containers or the
avoidance (or cessation) of smoking.

As mentioned later in this report, the UOP is currently implementing "community-based social marketing" on a pilot basis.

- While the UOP's campaign aims for "increased awareness" of the importance of recycling used oil, three of the other campaigns (DOC, DCA, and DHS) are directed toward numerical targets for behavior change, such as "80 percent recycling rate for all CRV containers," and the fourth (OTS) started with a numerical target that has now been exceeded.
- Among campaign messages, we consider DOC's "Recycle—It's Good for the Bottle
 and Good for the Can" and DCA's "Flex Your Power" to represent best practices.
 Both are more catchy than UOP's "Recycle Used Motor Oil." The UOP's message
 also conveys less substantive information than DHS's message about the dangers of
 tobacco and OTS's message about seatbelts saving lives.
- The UOP's campaign is largely decentralized, with heavy reliance on individual grantees choosing to use entitlement grant funds for outreach aimed largely at their own communities. Unlike the DOC, whose strategy is to reach multiple targets statewide with a single message and which spent over \$10 million to promote its "Good for the Bottle and Good for the Can" campaign, the UOP does not have funding to conduct a statewide marketing campaign. Furthermore, grantees are not required to use common materials, such as literature, or even the same message (although they are required to display the "oil drop" logo and acknowledge Board funding). Consequently, there is not a strong common message statewide.

Used Oil Programs in Other States

Following are findings from comparing elements of the California's programs with used oil programs in other states⁸.

- Of the states examined, only California regulates used oil as a hazardous waste. One agency (DTSC) establishes and enforces the regulations, while another (CIWMB) seeks to prevent improper disposal and promote recycling. As federal regulations allow, the other states do not regulate used oil as a hazardous waste, even though it may exhibit hazardous waste characteristics. A consequence of this distinction between California and the other states is that the potential liability associated with handling used oil in California is much higher, which is likely to discourage companies from agreeing to serve as collection centers.
- California's UOP receives revenue (around \$20 million per year) from a charge levied on lubricating oil manufactured or imported into the state. Utah's used oil program receives revenue (about \$550,000 to \$600,000 per year) from a charge of 4 cents per quart of lubricating oil, collected at the retail level on purchases in packages less than 55 gallons (with some exceptions). Programs in the other states lack similar revenue sources.
- California provides a recycling incentive payment of 16 cents per gallon to small-quantity industrial generators, curbside collection programs, and certified collection centers, for used lubricating oil collected from the public or generated internally and hauled to a certified used oil recycling, storage, or transfer facility. Members of the

⁷ Localities are prohibited from returning block grant money to the CIWMB, even voluntarily, for the purpose of conducting a statewide campaign.

⁸ Florida, Kentucky, Maryland and Utah.

⁹ If used oil is mixed with a "listed" or "characteristic" hazardous waste, it typically becomes subject to regulation and management as a hazardous waste.

public who bring in used oil to a certified collection center can claim the incentive payment. Utah's recycling incentive payments, also of 16 cents per gallon, are paid to collection businesses only and are not offered to DIYers.

- The establishment of collection centers to which the public can bring used oil is an important component of each state's program. California has the largest number of certified collection centers (more than double the number in any other state), which is not surprising, given the size of California's population compared to that other states.
- California and Utah have regular grants programs, although no grants were awarded in Utah in 2002. Other states have occasionally given grants. According to Florida state officials, Florida was strategic in giving out one-time grants in 1988, initiating a program that has continued to this date with little or no additional grant money being distributed—\$1 million went to local governments for the establishment of collection centers, and \$1.5 million went for statewide incentive/awareness and educational programs aimed at DIYers and school children; \$200,000 was allocated in 2001 for enhancement of Florida's educational materials.

In summary, the following are among the ways in which California's UOP differs from used oil programs in other states:

- In California, used oil is defined as a hazardous waste.
- With its large population of drivers, revenue generated is high because of the large quantities of oil that are sold, transferred, or imported for use in California.
- Local jurisdictions are continuously funded to support the UOP.

We now turn to our findings, analysis, and recommendations relating to the three levels of assessment of California's UOP.

Instrumental Objective: Achieving Effectiveness and Efficiency in Program Components

The primary focus of the UOP to date has been on creating a used oil collection infrastructure and system to decrease the incidence of improperly disposed oil. Although there is a State mandate also to promote the use of re-refined oil, the attention given to this by the UOP appears to have been uneven, at least until recently.

Focus on "Do-It-Yourselfers" (DIYers)

The term "automotive DIYers" is applied to individuals who change the lubricating oil in their household vehicles. From the beginning, the UOP focused primarily on automotive DIYers because they were considered the most likely sector to dispose of used oil illegally. Recently, attention has expanded from automotive DIYers to other individuals who change the lubricating oil in their own trucks, boats, agricultural vehicles, etc.

Businesses and other organizations recycle their used oil because they are required to do so by law. They are subject to inspection by enforcement agencies, and they face fines for failing to be in compliance. Although DIYers are also subject to fines for illegal disposal, they are not inspected, nor are they typically seen improperly disposing of oil, and thus they are virtually never penalized for illegal disposal. Consequently, the UOP has focused on educating DIYers about the benefits of proper oil disposal and providing them with convenient oil collection sites. Used oil programs in other states also tend to focus primarily on DIYers.

CIWMB-sponsored DIYer survey research in California, conducted in 1994 and 2001, supports the belief that DIYers contribute significantly to the illegal disposal of used oil. The most recent San Francisco State University (SFSU) study suggested that DIYers comprise about 19 percent of California households, down from 23 percent in 1994. (San Francisco State University, 2002, p.17) However, population increase had left the absolute number of DIYers about the same since the inception of the UOP in 1992. The SFSU study also suggested that somewhere between 8 and 36 percent of DIYers dispose of used oil improperly. (San Francisco State University, 2002, p. 25) Improper disposal appeared to be decreasing, which is consistent with UOP data indicating that used oil collected from the public is increasing as shown in Table 8. However, the SFSU researchers themselves expressed some uncertainty about the numbers of self-reported DIYers and improper disposers they surveyed, even after making extensive efforts to eliminate likely sources of bias and other inaccuracies. (San Francisco State University, 2002, p. 5)

To date, most UOP funds and grantee funds have been spent on providing used oil recycling education/outreach and collection facilities to various types of DIYer audiences: urban/suburban/rural residents, second-language residents, boaters, off-highway vehicle enthusiasts, growers, truckers, and small-airport users. The venues have been diverse and extensive, with DIYers targeted at sporting events, such as minor league baseball games, auto races, fairs, auto clubs events, industry (such as trucking) conferences, farms, marinas, and schools.

Interestingly, when SFSU convened a focus group discussion of independent truckers to determine if they were a DIYer-rich group, their responses suggested that independent truckers seldom if ever change their oil themselves. (San Francisco State University, 2002, p. 50) However, we are uncertain how representative this group is of all the independent truckers.

Even after a decade of statewide and local oil recycling outreach/education, the need to educate DIYers is still evident. It is important to remind them about proper used oil management and the health risks of improper oil disposal. Additionally, the inflow of new immigrants and the growth in numbers of young adults each year in California require that another group of citizens must be educated. Immigrants often come from countries where oil recycling is not practiced. These people therefore lack knowledge about proper used oil management and the health hazards of disposing of oil improperly.

In surveys, some DIYers also cite inconvenience as a barrier to recycling their oil. Since individual DIYers typically generate only small quantities of used oil on an occasional basis, even those knowledgeable about used oil management may believe that they can throw used oil in the garbage, yard, or storm drain without causing significant damage. The simple fact also remains that DIYers can illegally dump their oil and almost always remain undetected.

We recommend that the UOP should continue its efforts to educate automotive DIYers and others in fields such as agriculture and marine operations about proper used oil management and the risks of improper used oil disposal, targeting especially immigrants and young adults.

Recycling Incentive System

In accordance with a provision of the CORE Act, the UOP has established and operates a system for paying a recycling incentive of 16 cents per gallon to certified used oil

collection centers that collect used oil from the public and ship it for recycling. We heard a few complaints about the mechanics of this system (for example, the time taken to receive payment after a collection center has submitted a reimbursement request), but we were led to believe that the collections centers ultimately are reimbursed by the CIWMB for the oil they collect. UOP staff indicated that the turnaround time is now around two to three weeks.

Under the CORE Act, each certified collection center is required to pay, or at least offer, the 16 cents per gallon (or 4 cents per quart) incentive payment to members of the public who bring in their used oil. However, anecdotal evidence (from center operators) suggests that in practice certified collection centers often neither offer nor pay the 16-cents-per gallon incentive to members of the public unless they specifically request it. Collection centers actually have a disincentive to offer the incentive payment to the public because, when the public fails to claim it, the money remains with the collection center. Since CCCs are given no other financial support for their participation in the program, the revenue from unclaimed incentive payments is important in helping to offset labor, storage, and hauling costs associated with used oil collection.

Assuming that the collection center actually offers the recycling incentive payment, some interviewees questioned whether the amount is large enough to motivate DIYers to recycle their oil. This amount is so small that the public might not take the trouble to request it even if they knew of their entitlement. In many cases, it seems that DIYers are simply pleased to have a location at which to discard their used oil. The center's staff may also be too busy with product sales to bother offering it. Survey results from the SFSU study suggest that, at the incentive's current rate, convenience, such as perceived distance to the nearest collection center, is more of a motivator for DIYers to bring in used oil than the incentive payment. Survey responses indicate the incentive would have to be substantially larger in order to make a significant difference in oil recycling behavior. Note that Utah, whose per capita annual collection of DIYer used oil is 0.22 gallons, pays its recycling incentive only to businesses that collect used oil from the public, and not to the public itself.

In addition to paying reimbursement claims to certified collection centers for the public oil they collect, the CIWMB also pays the recycling incentive of 16 cents per gallon for used oil the centers generate themselves on-site. For example, if fast-lube businesses and auto repair shops are certified collection centers, they receive reimbursements for the claims paid to DIYers and payment for the used oil they themselves drain from vehicles. Precisely how much DIYer-generated oil is collected by these entities is unknown because they often mix the oil from their oil-change customers and DIYers together in the same tank.

The CIWMB also pays the 16 cents per gallon to industrial generators of used oil. These are individuals or businesses that generate used oil from equipment they own but cannot be certified as a used oil collection center because they are a non-retail business that is not open to the public. Typical industrial generators include agricultural businesses and construction companies.

Several interviewees questioned the wisdom of giving incentive payments to collection centers for oil they generate internally. Most of these are fast-lube and auto repair shops that receive 16 cents per gallon for the oil they are already being paid to drain from customers' vehicles. While these incentive payments do provide such businesses with the incentive to accept used oil from DIYers, the payments also subsidize their normal

operations. By law, these businesses would have to recycle the oil they drain from vehicles regardless of the incentive.

Some have suggested eliminating altogether the incentive payments to oil-generating certified collection centers. Another possible approach would be for the UOP to require fast-lube businesses and auto repair shops to track DIYer oil separately from internally generated oil (for example, by collecting the two types of oil in separate drums or tanks or by having DIYers sign a log when they bring in their used oil). The CIWMB would only give these businesses incentive payments for the DIYer oil they receive.

However, both strategies carry a significant risk, since fast-lube and auto repair certified collection centers constitute almost half of the total certified collection centers in the state. Discontinuing incentive payments for their internally generated oil or imposing other requirements might cause many of these businesses to leave the CCC program, eliminating up to 1,312 DIYer oil collection sites. Without the oil incentive payments, some fast-lubes and auto repair shops might continue as certified collection centers as a public relations or marketing strategy, but we cannot predict how many. The loss of half of the current CCCs is likely to make it less convenient for the public to recycle used oil in California. On the other hand, based in part on the SFSU study, the UOP staff currently estimate that only 1–3 percent of DIYer used oil statewide is collected at fast-lubes, although a larger proportion (around 10 percent) may be taken to auto repair shops.

An additional issue to consider is that if used oil recycling incentives were no longer provided to fast-lube businesses, these operations might be less receptive to future efforts to promote the use of re-refined oil when customers come in for an oil change.

Auto parts stores constitute the largest sector of CCCs (1,036) and differ from fast-lube and auto repair CCCs in that they collect a much larger volume of used oil from DIYers and do not internally generate their own used oil. Auto parts stores have a greater financial incentive to provide oil collection service for the public than the other two business types because DIYers who bring in used oil to recycle are likely to shop for other goods and services. For example, a study by First Recovery/Valvoline found that DIYers on average made purchases of \$13 per visit. (*Analysis of Certified Collection Centers*, n.d., prepared in 2004, p. 2)

In some other states, auto parts stores accept used oil from the public without paying an incentive. This is the case in Florida, which has a large population like California does. The amount of used oil collected annually from DIYers in Florida, divided by the state's population, is 0.18 gallons per capita, whereas the equivalent number for California is 0.26 gallons per capita. A number of factors are thought to contribute to Florida's success in collecting used oil despite the lack of a financial incentive, most notably the fact that used oil is not defined as a hazardous waste in that state.

Given existing mandates to provide used oil recycling incentives to fast-lubes and industrial generators, we recommend further research to determine whether the recycling incentive is needed to ensure proper used oil/filter disposal practices. Depending on the results of this research, we further recommend that serious consideration be given to changing the present recycling incentive system. Among the options that might be considered are:

• To cease paying the incentive for oil internally generated by fast-lube businesses, auto repair shops, and possibly fleet operators.

- To stop paying the incentive altogether.
- To increase the amount of incentive paid to some or all categories of certified centers.

Note that, even without incentive payments, certified (and some uncertified) collection centers would still be eligible for possible funding—for both infrastructure and operations—from one or another of the used oil grant programs. However, the elimination of some or all incentive payments would release funds that could be used in ways likely to be more effective in achieving the goals of the CORE Act. For example, eliminating incentive payments could result in an increase in the amount paid to the public per gallon of oil collected. It might also result in funding for other used oil projects, such as for agricultural or marina oil collection centers or for blending of used oil into crude oil.

As previously indicated, the recycling incentive is paid from the California Used Oil Recycling Fund, which receives revenues from a fee of 16 cents for every gallon of lubricating oil sold, transferred, or imported for use in California. However, this is not the only fee levied by the State on lubricating oil. The California Department of Food and Agriculture's Division of Measurement Standards separately collects a "Motor Oil Assessment Fee" of 2 cents per gallon for the purpose of supporting its Petroleum Products Program. This program maintains and enforces the minimum performance and drivability standards for most petroleum and automotive products (gasoline, gasoline/oxygenate blends, diesel fuel, motor oil, kerosene, brake fluid, automatic transmission fluid, engine coolant, and gear oil) sold in California, while also regulating the advertising and labeling of these products. Collaboration between the CIWMB and the Department of Food and Agriculture in the collection of the two fees would likely offer a gain in efficiency. We recommend that the two agencies further explore the feasibility and desirability of joint fee collection.

Certified Used Oil Collection Centers

A substantial number of certified collection centers have been established since the UOP was initiated in 1992; the current total is close to 2,700. The following table from the UOP's recent report, *Analysis of Certified Collection Centers*, prepared in 2004, confirms that auto parts stores constitute the largest single category of existing certified collection centers.

Table 5: Number of Certified Collection Centers by Facility Type

Facility Type	Number	Percent of Total		
Auto Parts Stores	1,036	39.1		
Fast-Lube Shops	618	23.3		
Auto Repair Shops	694	26.2		
Car Dealerships	101	3.8		
Other	47	1.8		
Landfills	39	1.5		

¹⁰ Information on program available in the following document: www.cdfa.ca.gov/dms/InfoGuides/pdfs/PetroFullVersion Business.pdf.

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Facility Type	Number	Percent of Total
Recycling Center	37	1.4
Local Jurisdiction Collection Center	25	0.9
Public Works Corporation Yard	12	0.5
Garbage Companies	14	0.5
HHW Facilities	8	0.3
Fire Dept.	9	0.3
School District	7	0.3
Total	2,647	

Source: CIWMB's Used Oil Recycling System (UORS) database.

Among other things, this report examined the reasons why some facilities have withdrawn from the certified center program. Of the 1,463 facilities that have withdrawn since the program's inception, 77 percent of the operators either gave no reason for leaving or indicated business closure or change of ownership as the reason for withdrawal. The remaining 23 percent cited problems with the program itself, such as:

- "Hassle factor," (for example, having to give out the recycling incentive, after-hours oil drop off, contamination to the collected used oil, DIYers interfering with business, poor relationship with local jurisdiction, or claim reimbursement problems.
- "Space/tank issues," (for example, inability or unwillingness to provide space for storing used oil or failure of locality to supply free tank as promised).
- "Cost" (for example, expense of oil hauling, employee labor, tank, or drum, or disposal of contaminated oil).
- Other reasons that were not provided in the CIWMB's Used Oil Recycling System database.

The report also noted that, compared to auto parts stores, a much higher proportion of fast-lube and auto repair businesses withdrew from the program.

Based on these and other findings, the report concluded that

- Recruiting additional CCCs throughout the state in concentrated DIYer areas would increase the convenience of oil disposal for the DIYer and decrease the volume of illegally disposed used oil.
- Auto parts stores are the most logical and promising facility type to recruit to the CCC program.
- Increasing the enrollment of auto part stores would increase the used oil collection capacity of the CCC program.
- Recruitment of potential auto parts stores should focus on close proximity to residential, neighborhoods with dense DIYer populations neighborhoods in urban areas where high concentrations of recent immigrants and multiple-housing structures exist.

• Strategies must be developed to overcome the hassle, space/tank, and cost issues identified by former CCCs in order to attract and retain CCCs.

Based on the results outlined in the CIWMB document *Analysis of Certified Collection Centers*, the Board considered and approved a contract concept to identify the barriers (a) to CCCs collecting used oil, (b) to DIYers recycling used oil, and (c) to auto parts stores participating as CCCs, with the ultimate intent of increasing convenient used oil collection by DIYers. The contract concept also includes a cost-benefit analysis of auto parts stores' participation in the CCC program.

We believe that the contract concept is appropriate. We also agree with the CCC analysis report conclusion that, in light of the SFSU study results, the **UOP should focus CCC** recruitment efforts on pockets of population not currently served by a certified center within a three-mile radius.

Financial incentives for certified collection centers currently include: the 16 cents per gallon reimbursements for DIYer oil; recycling incentives for internally generated oil; financial support from grantees in the form of advertising assistance and, infrequently, paying for oil hauling; and, at auto parts stores only, product sales to DIYers. Money paid to DIYers who recycle oil is essentially "flow-through," with no net gain to the CCCs.

Some interviewees believe that payment of the recycling incentive for oil generated internally by CCCs is not the best use of used oil funds. Interestingly, none of the CCC operators we interviewed mentioned the recycling incentive as a reason they joined the CCC program (although they may have felt obliged to give loftier motives). Other factors that may be more significant in either encouraging or discouraging business owners to join the CCC program include the perceived ease (or difficulty) of becoming certified/recertified and of complying with the program's requirements, the potential increase in profit via sales or service to DIYers, and the potential for problems associated with DIYers bringing in contaminated oil.

A number of the CCC operators we interviewed complained that the administrative requirements involved in certification, recertification, and reporting are too onerous. For example, some private-sector certified collection center operators believed that the reimbursement filing process is unnecessarily burdensome. They suggested that consideration be given to utilizing waste summary reports to streamline the process while still providing the necessary information. Some interviewees went out of their way to praise the helpfulness of UOP staff.

Having reviewed the current requirements for certification, recertification, and reporting, we are not persuaded that they are unduly onerous. The forms may seem a little intimidating at first, but this may be in part because they are multi-purpose—that is, they provide for different kinds of responses from different kinds of CCCs. Even so, the forms are not lengthy and they do not appear to demand information that is not necessary for UOP to perform its function as required under the CORE Act. We recommend continued searching for possible changes that would further simplify administrative processes, but we are not sure that there is much remaining potential in this area.

Interviewees also expressed concern about problems resulting from oil being dropped off in quantities larger than those with which they could cope and/or outside normal operating hours. Their biggest fear was that the oil might be contaminated and that their liability would extend beyond the \$5,000 once-per-year reimbursement offered by the CIWMB to deal with contaminated oil.

Furthermore, CCC operators can detect some forms of contamination fairly easily on-site, but the detection of polychlorobiphenyls (PCBs) requires more sophisticated equipment that they typically cannot afford. Since most CCCs do not test DIYer oil for PCBs, PCB-tainted oil from a CCC may not be detected until it has contaminated a larger mass of oil from other generators—for example, at an endpoint used oil recycling facility. In such a situation, CIWMB's \$5,000 once-per-year coverage for cleanup may not be sufficient. However, the extensive dilution that is likely to occur when contaminated oil is mixed with untainted oil from other sources may help to mitigate the problem. Furthermore, we were told that, since the manufacture of PCBs has been banned since 1978 (under the Toxics Substances Control Act¹¹n), occurrences of used oil contamination with these chemicals are already quite rare and might be expected to become increasingly so in the future.

UOP staff informed us that, in practice, there have been relatively few claims to date for reimbursement of costs associated with contaminated oil. Over 4.8 million gallons of used oil were accepted by collection centers in 2000, and 685 gallons were later determined to be contaminated. In other words, for every 7,126 gallons of oil collected, one gallon was determined to be contaminated, or 0.014 percent of all collected oil. Staff are aware of just 3 separate contamination incidences in 2000, and two in 2001. It appears that contaminated oil being dropped off at a collection center is an extremely rare event, although it is perceived by some as a very significant problem.

Nevertheless, the potential liability associated with contaminated oil and perceived insufficiency of oil contamination liability coverage continues to be a significant and legitimate concern for existing CCC operators. We were impressed by Maryland's policy of offering unlimited reimbursement for contaminated oil removal, but hesitate to recommend this for California because of the open-ended liability thereby created for the State.

We recommend that consideration be given to the following:

- (1) If the amount of \$5,000 for each once-a-year claim has not been sufficient to cover the cost of past oil contamination incidents, increase the maximum dollar amount for contaminated recycled oil reimbursement and possibly allow CCCs more than one claim per year, provided that the dollar cap is not exceeded.
- (2) In addition, or as an option, allow localities at their discretion to allocate block grant funds to CCCs to pay for the removal of contaminated oil.
- (3) Address the contaminated oil problem by means of a private insurance scheme, with localities' or individual collection centers' premiums subsidized partially or entirely by the State. We recognize that this third option may require new legislative authority.¹²

To reduce the risk of contamination and/or the associated costs, we recommend that UOP and its grantees step up their efforts to emphasize to all collection centers (both certified and non-certified) the advantages of using best management

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¹¹ U.S. Code, Title 15, Chapter 53, Subchatper I, section 2605(e).

¹² Note that grantees may currently "pay for a rider on their insurance to cover the possibility of contaminated loads at non-certified centers. The centers must, however, also take steps to prevent contaminated loads by using signs, fencing, education, etc." (Used Oil & HHW Branch, *Manual of Policies and Procedures*, Section 3-23, May 1998).

practices, which some centers have already adopted. The UOP should also inform all CCCs of the extremely low contamination incidence rate.

An example of a best management practice is requiring those who bring in used oil to supply identification and sign a log, thereby providing a tracking mechanism that might at least discourage people from knowingly bringing in contaminated fluid (although the "hassle" involved might also serve as a disincentive to overall participation in used oil collection). Another is encouraging certified collection centers to use "sniffers" (possibly bought for them by grantees) that detect some forms of contamination, although not PCBs. Yet another is encouraging CCCs to have their full collection tanks locked and tested for PCBs before they are emptied for hauling; in the meantime, incoming used oil is stored in a second tank or, more often, temporarily in drums.

UOP informed us that its staff investigated developing a low-cost test kit that certified collection center operators could use to detect PCBs in used oil. However, potential researchers believe that the anticipated market demand for a PCB test kit is insufficient to warrant developing one. Furthermore, considering the very low (0.014 percent) incidence of contamination to date, it is likely that a kit would cost more to develop than the CIWMB would save in avoided oil disposal reimbursements.

Finally, there is concern that a test kit might be sensitive to interference and that a load suspected of PCB contamination would still need to be tested for definitive results using a gas chromatograph. We recommend that the UOP staff further investigate the concern about interference. If the concern is not well-founded (or if it could be readily overcome), we recommend that UOP staff consult with the staff of oil recycling programs in other states, as well as with federal officials, to explore the possibility of partnering in an effort to develop a low cost PCB detection test kit for a potential national market.

Another issue facing used oil collection centers is that of deciding whether to accept used oil filters. At present, the conditions of certification do not require CCCs to accept filters, but grantees are allowed to spend oil recycling funds to support voluntary oil filter collection efforts.

A detailed examination of the present oil filter program's success to date was beyond the scope of the present study. But intuitively, we believe that the return rate for filters would increase if filter collection were offered at most or all CCCs to which DIYers bring their used oil. Accordingly, we recommend that consideration be given to (1) providing collection centers with more of an incentive to accept used oil filters, through, for example, a filter exchange program in which a free filter is provided for every one or two used filters disposed of, and (2) encouraging grantees to use block and competitive grant funds to purchase filter crushers for CCCs, as appropriate, and/or to pay for hauling used oil filters to recyclers. The Board might consider going as far as requiring certified collection centers to accept filters, but if it did so, the CCCs should be allowed to request a waiver from this requirement if physical constraints made it impossible to meet.

Grants

From the beginning, consistent with the CORE Act, the UOP has employed its grant programs—both block and competitive—as the primary tools to bring about the diversion and recycling of used oil. Both former and present staff have said that "getting the funds out" was (and still is) high on their list of objectives, if not at the very top. As the

following table demonstrates, they have been successful in doing just that, awarding a total of \$167,107,912 in 10 years, of which \$145,626,027 has been spent (as of the end of fiscal year 2003). On an annual average, the UOP has disbursed \$16.7 million each year, of which a minimum of \$10 million must be given to local government as non-competitive grants (PRC section 48653).

Table 6: Used Oil Grants Awarded Fiscal Years 1993–94 Through 2002–2003

	1993–94	1994–95	1995–96	1996–97	1997–98	1998–99	1999– 2000	2000–01	2001–02	2002-03	Total
				Used Oil	Recycling B	lock Grants (UBG)				
Cycle	UBG1	UBG3	UBG4	UBG5	UBG5	UBG5	UBG5	UBG6	UBG7	UBG8	
Awarded Amount (\$)	14,519,758	8,190,631	9,351,901	34,260,603	0	0	0	12,254,656	11,316,819	15,779,610	105,673,978
Grant Funds Spent (\$)	12,150,691	7,254,208	8,418,705	33,640,074	0	0	0	11,825,749	10,500,251	13,609,433	97,399,111
Grants Awarded	162	162	192	253	0	0	0	243	233	225	1,470
			ı	Jsed Oil Gran	ts for Nonpro	ofit Organizat	ions (UNP)				
Cycle		UNP1		UNP2		UNP3		UNP4		UNP5	
Awarded Amount (\$)	0	1,204,459	0	3,313,615	0	2,518,505	0	3,282,176	0	2,631,167	12,949,922
Grant Funds Spent (\$)	0	1,120,269	0	2,985,235	0	2,380,330	0	3,019,816	0	100,293	9,605,943
Grants Awarded (#)	0	19	0	43	0	18	0	19	0	12	111
				Used (Oil Opportuni	ity Grants (UC	OG)				
Cycle	UOG1	UOG2	UOG3		UOG4		UOG5		UOG6		
Awarded Amount (\$)	8,352,720	8,299,657	6,773,946	0	7,890,003	0	6,372,585	0	5,103,183	0	42,792,094
Grant Funds Spent (\$)	6,738,231	7,463,111	5,924,978	0	7,168,181	0	5,992,520	0	1,605,089	0	34,892,109
Grants Awarded (#)	54	62	43	0	30	0	22	0	18	0	229
			Used (Oil Research,	Testing, and	Demonstration	on Grants (UI	RD)			
Cycle		URD1	URD2							URD3	
Awarded Amount (\$)	0	1,427,802	2,997,618	0	0	0	0	0	0	1,266,498	5,691,918
Grant Funds Spent (\$)	0	1,203,744	2,525,120	0	0	0	0	0	0	0	3,728,864
Grants Awarded (#)	0	9	16	0	0	0	0	0	0	6	31

Source: CIWMB Grants Administration Unit

Overview

Statute requires the Board to disburse block grant funds directly to the local jurisdictions. The philosophy behind this approach is that of enabling local jurisdictions, individually or in collaborative arrangements with other jurisdictions, to establish used oil collection programs most suited to local circumstances, based on local knowledge. The UOP philosophy also reflects the belief that, in order to be effective in persuading DIYers and others to participate in these programs, education and outreach must be conducted at the community level.

A major challenge faced by the UOP has been that of designing and implementing an administrative system that achieves a balance between:

- Giving sufficient direction to grantees to maximize the likelihood that even those with the
 least expertise and/or commitment will achieve the statewide goals of preventing the
 improper disposal of used oil and causing it to be recycled instead.
- Giving sufficient latitude to grantees to pursue these goals most effectively and efficiently, given their knowledge of local circumstances.
- Allowing grantees and UOP staff to "get on with it," with the focus on program implementation and continuous improvement, not administrative paperwork.
- Achieving adequate accountability so that the UOP can maintain its fiduciary responsibilities to ensure that public funds are properly spent.

Beyond setting restrictions on allowable expenditures, the UOP does not prescribe the manner in which recipients are to spend block grant funds. Grantees are largely left to establish their own goals, objectives, and activities, although UOP staff does provide technical assistance. Recipients of competitive grants, on the other hand, receive more direction in the form of the "program criteria" that are established prior to each grant cycle and used in scoring their applications. These recipients are expected to apply their own knowledge, skills, and creativity in furthering the goals of the UOP based on the criteria.

Administration of Grants

Both the CIWMB's UOP staff and Grants Administration Unit staff are involved in the administration of all used oil grants. The UOP staff must seek a balance in their relationship with the Grants staff, who understandably strive for some level of consistency across all grant programs throughout the CIWMB. While the UOP staff are more knowledgeable about, and anxious to achieve, used oil-related objectives specifically, the GAU staff must ensure this is done in a manner that is consistent with a variety of federal and State rules and regulations (many of which are unrelated to used oil), and satisfies the agency's auditors. The Board's legal staff play a role in this too.

In the initial years of the UOP, grant managers provided technical assistance to grantees setting up used oil collection/outreach programs. But for the past decade, the sheer volume of grants to be managed and increased accounting requirements imposed on grant managers by the Grants Administration Unit as well as the Board have reduced UOP grant manager technical assistance to grantees to almost nothing. Within the past several years, UOP management has pursued simplification of these grant administration requirements, with the goal of enabling grant managers to provide grantees with more technical assistance and spend more time evaluating programs that grants fund. To continue these practices, we recommend that UOP and Grants staff further analyze their administrative procedures to determine the critical tasks, identify the roles and functions of each unit, and further streamline the grant process.

As the UOP has implemented successive cycles of block grants, a variety of major changes have been made that required Board approval (for example, in the January 1997, September 2000, and December 2002 Board meetings). In most cases, often in reaction to feedback from grant managers and grantees, these changes eased the administrative process through means such as simplifying the application form, reducing and streamlining the reporting requirements, or giving recipients greater flexibility in determining when and how they spend their grant funds.

Changes relative to competitive grants, on the other hand, were typically made in response to audit findings, and have not necessarily made the process easier, at least from the grantees' perspective (an example would be requiring the General Checklist of Business Permits, Licenses, and Filings). Overall, the administration of UOP's grant programs was described by many of our interviewees as having become increasingly "bureaucratic" with age.

Selected issues relating to UOP's grant programs are discussed in the following sections. They relate to:

- 1. Overlapping cycles (block grants).
- 2. Application procedures and support.
- 3. Equitable allocation of grants.
- 4. Criteria for awards (competitive grants).
- 5. Allowable expenses.
- 6. Grantee reporting (non-financial).
- 7. Grantee reporting (financial) and grant payments.
- 8. On-line applications and reports.
- 9. Performance of individual grantees.

Overlapping cycles (block grants): The current procedure for awarding block grants annually, while giving localities three years in which to spend the funds, creates a great deal of work for both the grant managers and the recipients. The existence of overlapping cycles (compounded by the fact that some localities simultaneously receive opportunity grants as well) can create confusion, as recipients try to keep track of revenues and expenditures tied to particular cycles. Since the grantee eligibility criteria contained in statute are relatively easy to satisfy (in other words establishing a used oil program that includes collection opportunities and public education and submitting an annual report), and jurisdictions receive block grants as an entitlement, we recommend that consideration be given to completely overhauling the cyclical process currently used for block grants. We recommend replacing this process with one in which the Board automatically allocates each locality's annual block grant (without requiring a new application), as long as the localities have met applicable reporting and other accountability requirements for the previous grant cycle.

Application procedures and support: It was evident from the interviews that grantees sometimes have an out-of-date or otherwise inaccurate view of application and grant management requirements. Occasionally, for example, they complained about aspects of the application process that had already been changed (or have been changed since). One of the expressed concerns was that insufficient time is allowed between the issuance of the Notifications of Funding Availability (NOFA) and the deadlines for submittals. Many applications require the collaborative work of different entities such as municipalities, State and federal agencies, and non-governmental organizations, as well as bids from contractors. Getting everyone "on board" takes a long time, especially if authorization and/or endorsement have to be voted upon by various councils and boards. It was noted that grant programs operated by California State agencies other than the CIWMB allowed even less time (for example, SWRCB's Clean Beach Initiative, which allows as little as three weeks for some programs), while others allowed more

time (for example, the Department of Conservation's Beverage Container Recycling Program, which allows 90 days). Changes have been initiated to address this concern, as evidenced by the longer application periods provided in the recent cycle for research, testing, and demonstration grants as well as those for block grants.

Another concern was expressed in regard to the proposal-writing workshops that have been offered by staff to would-be grant applicants to assist them in the application process. Although the workshops were praised as informative and helpful, the concern was that too little time was left between the workshops and the submission deadlines. However, the timing of the workshops has been tied to that of the statewide used oil/household hazardous waste conferences held annually (except, for budgetary reasons, in 2003). According to UOP staff, the intent of these workshops has been to provide knowledge that might be used in subsequent grant cycles even if it comes too late for a cycle that happens already to be underway.

We did not further pursue this issue. However, if grantees continue to raise it, we recommend that staff pay careful attention to the timing of key stages in the application process, including the offering of workshops, and that they seek and take into account the opinions of would-be applicants in this regard (through informal de-briefings and other means). As an alternative to holding workshops, the staff might consider producing and distributing a video to assist in preparation of grant proposals and/or enhancing the support available via the UOP website. Additional assistance might be given to individual applicants via means such as one-on-one meetings, phone, and e-mail contacts.

Based on our review of the application packages used in the most recent block and competitive grant cycles, we do not believe that they are unreasonably complicated or demanding. Indeed, we believe that, for the most part, the staff have done a good job of minimizing the information required and presenting the materials in a straightforward and understandable manner.

One item over which the staff have little control and about which interviewees often complained is the requirement for applicants to provide authorizing resolutions from governing bodies that cover, at a minimum, the period of the grant cycle (three years for block grants). Some grantees whom we interviewed complained that it can be very time-consuming to obtain these resolutions, especially when multiple jurisdictions are involved. It appeared, however, that not all interviewees were fully aware of their existing ability to submit a generic resolution that covers all used oil and household hazardous waste competitive grants for which they might apply during a five-year period. (Note that, in the case of block grants, a generic resolution can be used to cover no more than three three-year cycles.) Furthermore, a jurisdiction participating in a collective arrangement such as a regional or cooperative program, if not the lead agency, may submit an authorization document other than a resolution (for example, a letter of authorization signed by an agency representative with decision-making authority).

We note that applicants to the Department of Conservation's Beverage Container Recycling Program are able to use generic resolutions without time limits—that is, they are only required to obtain a new resolution if/when the information on the existing one is no longer valid.

We recommend that the Board consider emulating the Department of Conservation in allowing authorizing resolutions to be used as long as the information on them remains valid. We further recommend that, in the meantime, greater efforts be made (such as via the *Used Oil and HHW Grants Bulletin* and the Statewide Annual Used Oil/Household Hazardous Waste (HHW) Conference, jointly sponsored by CIWMB and the Department of Toxic Substances Control) to ensure that all jurisdictions are fully aware of the options they can pursue in lieu of individual resolutions for each grant application.

Distribution of grants: A question that was raised in some interviews was whether the per-capita formula used to allocate most block grant funding provides the best way to achieve the goals of the UOP. Currently, a minimum of \$5,000 is provided to small jurisdictions and \$10,000 to counties if the per-capita formula provided less than the minimum. It was suggested by some that rural communities should be given priority with grants because they generally produce more DIYer used oil per capita than more urban areas. There are also fewer traditional retail collection centers in rural areas than in urban areas. Note that Utah favors rural jurisdictions in its grant programs for reasons such as these. On the other hand, rural residents are not clustered in dense population areas as are residents in cities who in total generate a much higher volume of used oil than those in rural areas.

We were also told (and find it intuitively reasonable to believe) that the larger jurisdictions tend to fare better than the smaller ones in the competitive grant programs because they typically have more resources to invest in developing successful proposals. Even with points added in the scoring process for applicants who have not previously won a grant, there may still be a bias against the smaller and especially the rural jurisdictions. However, the time limitations prevented us from conducting an in-depth review of all the grants to explore possible inequities.

If a problem indeed exists, then one way of addressing it would be via the opportunity grant program. It is apparent from Table 5, above, that expenditures on opportunity grants have, for the most part, declined in successive cycles. The total awarded in the sixth cycle was just over \$5 million compared to the over \$8 million awarded in the first cycle. Although the CORE Act ties the minimum amount to be spent annually on opportunity grants to the total amount available in the Used Oil Recycling Fund, it is not clear whether the observed decline in opportunity grant spending solely reflects changes in fund levels.

In our interviews of UOP staff and grantees, we heard mixed reactions to the decline. Some believe that it has been both deliberate and appropriate, reflecting a reduced need for new infrastructure once the initial phase of the used oil program was implemented (when new collection centers were established). A few interviewees proposed that opportunity grants should be eliminated altogether, with the funds that would have been distributed through this program instead being allocated on a per-capita basis as block grants. Some argued that the competitive program should be retained, suggesting that it is still important to have a way of targeting funds at specific localities or at particular innovations as the whole program matures. Others believed funds should be used to cover qualifying non-recurring costs or start-up costs for programs not yet fully developed.

As the UOP staff take a more proactive role in helping grantees identified as poor performers do better in the future, the results from new or innovative programs could be used as best management practices to increase the effectiveness of those poor performers. Such grants could be used to refine new collection or outreach strategies.

Taking all into account, if further research substantiates interviewees' concerns about the distribution of grants, we recommend that consideration be given to restructuring the opportunity grant program so that only small- or medium-sized and/or rural jurisdictions (cities and counties below 100,000 in population) might apply. Applicants would be expected to demonstrate how they would use the extra funds in an effort to target DIYers not currently served by curbside collection or conveniently located collection centers.

Criteria for awards (competitive grants): As indicated in the section of this report entitled "Scoring Process for Competitive Grants" (main section: "Summary Description of California's Used Oil Program"), around 15–20 percent of the points awarded in the scoring process for competitive grants are based on program criteria which are specific to each individual grant cycle.

These criteria provide for all applicants an indication of the types of grant activities that the UOP finds important to pursue in order to achieve program goals. Applicants submitting grant proposals that meet the criteria are awarded additional points. The priority program criteria are also used to increase the likelihood of a grant award to applicants that did not receive a grant during the previous grant cycle. As a result, an application submitted a second time, such as by a disadvantaged/underfunded/inexperienced local government or business whose first attempt was unsuccessful, is awarded additional points and is more likely to end up with funding.

We believe that the use of priority program criteria is critical since they provide the Board with the ability to focus the attention of would-be grantees on the types of activities considered most likely to assist the UOP in reaching program goals (including needed innovation in the development of more effective oil recycling strategies), providing technical assistance to poorly performing jurisdictions, and satisfying local jurisdictions' needs. Since the effectiveness of this approach relies on the UOP remaining well-informed about what the most promising activities are as well as about gaps in service delivery, we recommend that the UOP staff continue to conduct research and analysis on used oil recycling/disposal issues.

Allowable expenses: The issue of allowable expenditures under the UOP grant programs was raised by a number of interviewees. Of particular concern were the amounts that can be spent on administrative costs. For grants in excess of \$20,000, as indicated in the competitive grant application guidelines, the Board has set a maximum of 10 percent of the total grant award for administrative costs. Among those expressing concern about this limit were nonprofit organizations and jurisdictions involved in regional programs. Nonprofit organizations, especially small ones, stated that they often end up pulling from their own scarce funds to accomplish the goals set out in their proposals.

We were told that individual jurisdictions eligible for less than \$20,000 in block grant funds, which would otherwise be exempt from the 10 percent limit, become subject to the limit when they pool their resources in a regional consortium. However, interviewees claimed that the capped amount is not sufficient to pay the administrative costs normally charged by a contractor to provide the needed services on a regional basis.

Arguably, it is the very jurisdictions that lack adequate staff and other resources to administer the used oil grants that are the most challenged by the limitations; larger jurisdictions with more extensive resources are less likely to be so affected. We note that the other State agencies whose grant programs we examined appear not to have pre-set limits on administrative costs but instead seem willing to negotiate these on a case-by-case basis or evaluate them during "scoring" of the budget section of a grant application. Typically, those with a high administrative cost rate in relation to the services delivered receive a lower score.

We note that this is an issue not only in the used oil grants program but also when the Board seeks work directly through contracts. UOP staff typically attempt to negotiate the lowest possible indirect or overhead charges from contractors. For example, UOP staff negotiated indirect costs for several contracts with different California State universities which were 10 to 20 percent lower than the indirect costs the universities normally charge for such contracts. The universities' normal rate for indirect costs reflects standard overhead rates that are negotiated periodically with the federal government on the basis of actual (audited) costs. Attempts by the UOP staff to negotiate lower overhead rates pose a special dilemma for the California State universities and State agencies, because they are required by statute in this situation to recover all their costs and not, in effect, to subsidize those with whom they are contracting. (We were subsequently told by staff that the policy related to overhead is not applied to agreements with other State agencies.)

We recommend that the Board allow the staff to take a more flexible approach in negotiating administrative and other overhead costs with both grantees and contractors, especially when dealing with smaller organizations (including localities which pool their resources in regional programs) and with entities whose overhead rates are based on audited data. In addition, overhead rates could be addressed in terms of cost-effectiveness or budget during the review of competitive grants.

Grantee reporting (non-financial): Complaints were heard from some (but not all) grantees interviewed about the reporting requirements associated with the grant programs, which seek information about process and outcomes as well as financial data. It is important to recognize that reporting serves at least two different functions: one (accountability) is to ensure that funds are spent appropriately to accomplish approved purposes; while the other (assessment) is to supply information about which activities have proved most effective in producing desired outcomes, such as less improper disposal of used oil and more recycling. Assessment results are particularly important in efforts to improve the used oil program in the future. If reporting requirements are reduced, these functions may not be served as well, and concerns may arise about possible abuses.

Although in the past, biannual program reports were required from all recipients of block grants, Board action in December 2002 changed the requirement to once per year. The nature of the annual report is prescribed and requires the recipient to fill in a number of spaces with quantitative and/or narrative information about grant activities and oil collected under the categories of Permanent Collection Facilities, Temporary or Mobile Collection, Residential Collection, Load Check, Community Events, School Education, Media Outreach, Storm Drain Filters, Stencils/Markers, and Storm Water Mitigation.

Given the amount of money involved, particularly for the more populous localities, we believe that it is reasonable for the Board to demand this level of accountability, especially since the UOP staff can supply jurisdictions with oil collection data to use in their annual reports if they are unable to collect the data from each of their CCCs. The Board is able to supply data from hauler manifests and regarding CCC recycling incentive reimbursement requests. Although the Board clearly wants and needs data presented in grantees' annual reports to be as accurate as possible, the reality is that "good-faith" estimates are probably the best that can be expected for some of the numbers requested.

The reporting requirements vary for the competitive grants (for example, the latest opportunity grant cycle requires a mid-term progress report and a final report during the three-year grant term) but, again, we did not find these requirements to be unreasonable from an accountability perspective. They do not appear to be out of line with grant reporting requirements imposed by other State agencies (and may be less demanding than some).

On the other hand, it is appropriate to ask whether all of the information collected in these reports is being used, or is likely to be used in the future, for the betterment of the program. We were led to believe that, until mid-2003, little attempt was made to make systematic use of much of the information submitted in grantees' reports, beyond tracking the numbers relating to used oil and filters collected (some of which came from the UOP staff themselves). The UOP staff workload and impact of budget reductions was such that not much time was available for conducting more extensive analysis. Furthermore, beyond occasional profiles of grantee programs in the intermittent *Used Oil and HHW Grants Bulletin* newsletter, information was not readily available to those outside the UOP itself. For example, the used oil website

(www.ciwmb.ca.gov/UsedOil/Grants/Research/) lists brief project descriptions for the first two cycles of research, testing, and demonstration grants, but gives no indication of the results of these projects or where results might be found.

These are critical findings because they reveal a significant gap in the ability of the UOP and its grantees to improve their effectiveness at accomplishing the program's goals through learning from experience. We understand, however, that the situation is changing. In 2003, after the start of this study, UOP staff began analyzing grantee program data to determine which programs and program delivery methods have achieved the highest rates of per capita used oil collection and why.

Upon the completion of this assessment, staff plans to share the results of this analysis with grantees and encourage them to adopt and customize grantee program models and elements that have proved most successful. Since grant management administrative requirements recently lessened, UOP staff have begun to conduct mid- and end- of grant cycle evaluations for a sample of grants to both determine if grantee process and outcome goals were achieved and improve grantee performance in future cycles. Staff members are also reorganizing the Used Oil Program website and plan to post profiles of successful grantee programs from each grant cycle on an ongoing basis for use by all grantees. We believe that these initiatives are essential if the UOP is to make further progress in accomplishing its goals and we strongly recommend that they be continued, with adequate support from the Board.

As suggested above, we believe that the UOP's current reporting requirements, having been reduced from those in earlier cycles, are not overly burdensome and that grantees should be able to submit them in a timely manner. Nevertheless, we recommend that the UOP staff continue to look for opportunities to further reduce the paperwork faced by grantees and grant managers, taking into account feedback from the grantees themselves. We do not believe that accountability is a problem in the UOP grant programs. None of our interviewees were of the opinion that there has been significant abuse in the spending of grant funds, nor did they believe that abuse would become a problem if less reporting were required. In any event, the auditing system provides a safeguard, which many feel is sufficient.

However, *timely* submittal of reports, particularly for the block grants, is a serious problem. UOP staff spends a significant amount of time "chasing down" delinquent reports—sometimes as long as 11 months after they are due. This staff time could be better spent providing technical assistance to poor performers or analyzing program effectiveness. We recommend that the Board enable UOP staff to adopt a 90-day grace period for block grant reporting, similar to the time allowed for the return of grant agreements, and strictly enforce this reporting requirement. Grantees who do not turn in satisfactory reports within that time period should lose eligibility for the subsequent block grant, based on poor performance.

We believe that the primary criterion for deciding what reporting to require should be the potential benefit to be gained from being able to analyze the information obtained. We recommend, therefore, that the UOP staff regularly review what kinds of analyses are most likely to help them further improve the program, now and in the foreseeable future, and adjust the reporting requirements accordingly.

We also recommend that the UOP continue to increase the accessibility of grant project results as well as other relevant information generated by contractors and grantees. This increased accessibility could be through the program's website and in more frequent issues of the *Used Oil and HHW Grants Bulletin*.

A promising tool for improvement is the grants database, which the public is now able to access on the CIWMB website (www.ciwmb.ca.gov/Grants/Reports/). Further use of the database as a centralized resource would likely increase the knowledge of UOP staff and the public regarding grant activities and outcomes. For example, waste stream collections resulting from each awarded grant could be entered into the database in order to show the effectiveness of the grant activity.

Grants that do not generate a high level of collections could be qualitatively assessed in terms of success and level of importance for future research gains. Assuming that the database continues to perform up to expectations, we recommend that adequate resources be provided to allow the UOP (and other CWIMB grant programs) to enter grant performance data and to fully exploit the tool's qualitative and quantitative analytical capabilities.

In their grant program reports, grantees are required to include several attachments. Block grant recipients, for example, must attach copies or photographs of infrastructures, public education materials, and premiums paid for with grant funds. We did not hear complaints from interviewees about these in particular, but grantees were definitely unhappy with the requirement for recycled-content certification.

California law requires that all State agencies must purchase products containing recycled materials whenever price, quality, and availability are comparable to the same products that do not contain recycled materials. Furthermore, for 12 reportable product categories, State agencies must spend a specified minimum percentage of dollars on products that meet the minimum recycled content (RCP) requirements.

Several grantees noted that recycled content forms can be time-consuming to complete and they wondered if other means of promoting recycled material use might be considered. At a minimum, they argued, grantees should be given greater assistance in identifying vendors of products satisfying the requirement for 50 percent recycled-content or they should be provided with an easy way to share relevant information.

The UOP does maintain on its website a vendor list of the recycled content of products that grantees are most likely to use. We believe that this list may need to be expanded and more widely advertised. The grantees also requested that consideration be given to relaxing the standards for those products with no RCP equivalent on the market. Given that the Board has a unit charged specifically with promoting the purchase of recycled products, we recommend that the UOP encourage the Buy Recycled unit to provide information on the website that could benefit the grantees as well as the public.

It was not clear from published information that the other California State grant programs examined in our study currently require their grantees to complete recycled-content certification forms, although the statutory recycling requirement appears to extend to them too. Those whom we interviewed at these other agencies were not aware that this requirement is being implemented within their programs. As long as the RCP requirement is in place, however, we recommend that, provided the grantees make a good faith effort to fill them out, Buy Recycled staff should show reasonable flexibility in reviewing the recycled content forms, consolidating the data, and allowing for the fact that information about some products might be difficult to obtain.

Grantee reporting (financial) and grant payments: As previously mentioned, block grant recipients are required to submit expenditure itemization summaries annually. Recipients of competitive grants, who are paid on a cost-reimbursement basis, must accompany their requests for payment not only with expenditure itemization summaries but also with all supporting documents, such as invoices. We expect that the expenditure itemization summaries would provide program managers with sufficient information to be able to verify, subject to audit, that the actual cost of an item billed by the grantee matches the proposed cost (in the grant proposal). As discussed in the previous section, the auditing system is believed to provide an adequate safeguard against abuse, and therefore we recommend that grantee documentation of

expenditures for competitive grants be confined to an itemized list of expenditures rather than copies of all receipts.

According to some interviewees, the withholding of 10 percent of grant payments, plus interest, until the entire allocation of funds for a particular grant cycle has been spent has been a significant problem for entities that generally operate on lean budgets, especially nonprofits. Hard-to-raise operating funds must typically be used to make up the difference until the 10 percent is ultimately reimbursed. On the other hand, UOP staff pointed out that the 10 percent withholding provides the only leverage that a grant manager has to make sure the grantee completes the project as proposed (even if the grantee is fiscally responsible). Nevertheless, we recommend that consideration be given to allowing nonprofit grantees, in particular, to seek waivers from the 10 percent withholding rule (possibly only for grants up to a specified size) upon demonstration of adequate fiscal responsibility.

State law requires that funds advanced to a grant recipient must be placed in an interest-bearing account. The recipient is required to track and report the interest earned, and return any unspent interest to the State. The grantee is not permitted simply to subtract the interest from the claim for reimbursement of the 10 percent of grant money withheld until the end of the grant period. Instead, the withheld money must be claimed first, and a reconciliation of the interest performed subsequently.

Block grantees receiving \$20,000 or less per cycle may avoid having to meet this requirement by opting for payment on a reimbursement rather than an advance basis. Because of the work involved in interest tracking (including monitoring by the grant managers), the requirement drew complaints from both UOP staff and block grant recipients whom we interviewed. In our review of grant programs administered by other State agencies, it is noteworthy that we learned of only one agency that requires interest tracking, despite the fact that funds are advanced (rather than reimbursed) to grantees in at least one of the other agencies.

While recognizing that a statutory change may be necessary, we recommend that consideration be given to requesting a waiver of the interest-tracking requirement for advance payments that are relatively small (such as below a designated threshold, to be agreed upon with the Department of Finance). We further recommend that when interest tracking is still required, grantees be allowed to subtract the interest from their claim for reimbursement of the 10 percent of grant money withheld until the end of the grant period.

On-line applications and reports: UOP staff mentioned several times during our study the possibility of increasing the efficiency and timeliness of processes for grant applications and reports (and, literally, reducing paperwork) by shifting to a system that is mostly or entirely online. A concern was whether electronic signatures could safely be substituted for those written on paper. We understand that electronic signatures have already been approved for use in connection with State procurement, and we are optimistic that they could be designed in such a way as to be adequate also in the context of used oil applications and reports. Accordingly, we recommend that the UOP staff look into the possibility of shifting to a system for grant applications and reporting that is mostly or entirely on-line.

Performance of Individual Grantees: To a large extent, the success of the UOP in promoting the recycling of used oil, rather than its improper disposal, lies in the hands of the grantees. However, the Board and the UOP staff have limited recourse if grantees are unable and/or unwilling to use the funds awarded to them, especially block grant funds, in the manner most likely to accomplish the program's goals. Very rarely has "poor performance" been given as a reason for the Board's withholding of funds from grantees, and in this context "poor

performance" means delinquent reporting up to 11 months after the annual report due date and/or owing the Board money.

We were told that in the 9th cycle of block grants (UBG9), no grants were denied for not turning in the required annual report or for turning it in late. However, some former grantees did not even apply for funding in the 9th cycle, as they owed the Board money or had other outstanding audit issues. In the previous cycle (UBG8), at least two former grantees did not apply due to delinquent reports or outstanding debt, while one grantee was denied funding due to delinquent reports. Similarly, "poor performance" in the competitive grant programs is defined as owing the Board money as the result of an audit finding. The process for selecting grantees in these programs is through awarding of points and does not explicitly take into account other aspects of performance, that is, how successful the grantee might have been in achieving the UOP's goals during a previous grant cycle.

We considered whether, on the basis of our study, we should recommend that past performance, more broadly defined, should become a factor in the award of block and/or competitive grants. Even if it were legal to do so, which is probably more questionable with block grants than competitive grants (block grants are essentially entitlements under the CORE Act and delinquent reporting may be the only performance measure allowable), we are not convinced that it would be either feasible or desirable. The Board would have to decide on appropriate criteria and their relative weightings, such as how much consideration to give to initiative and effort as opposed to demonstrated outcomes. The latter are affected by a variety of factors, some of which are outside a grantee's control, and there may occasionally be a case for giving *more* support rather than *less* when a particular population of DIYers proved difficult to reach.

Furthermore, the Board does not currently have access to all of the information that it would need to make decisions based on performance; because of the entitlement nature of block grants, any decision to withhold this kind of funding would have to be very strongly supported in order to withstand legitimate challenge. The Board relies on the grantees themselves to supply most of the data used for evaluation. The present intended use of the data is primarily for program improvement. If the grantees were at risk of losing funds as a result of submitting unfavorable results, they would have less of an incentive to submit information that is accurate and complete.

Although we do not propose tying the award of block grants to past performance in meeting the Board's used oil diversion and recycling goals, we do recommend that UOP staff take a more proactive role in helping grantees identified as poorer performers (based on such data as used oil collections versus sales of oil) to do better in the future. We understand that grant managers have recently been asked to target for extra attention (through means such as technical assistance) the five poorest performers among their grantees, and we believe that this represents a promising approach.

The situation is different for competitive grants, which are awarded on a discretionary basis. In the competitive grant programs, it may be more feasible and appropriate to take applicants' past performance into account, although once again the Board may not currently have the information needed to do this (at least based on the earlier grant cycles, whose outputs and outcomes were typically not well documented). Nevertheless, we recommend that consideration be given to adjusting the point system used in the selection process for competitive grants, when adequate information is available, to take into account past performance.

Outreach, Education, and Website

Outreach

Just as there is no published strategic plan for the used oil program as a whole, there is also no published plan for the program's outreach efforts. We were shown no systematically defined set of goals and objectives for outreach in UOP. Rather, we were referred to a series of individual concepts proposed to and approved by the Board, which appear to have provided the basis for outreach activities. We recommend that, as part of the proposed strategic planning activity for the overall program, a plan with explicit outreach goals and objectives be prepared.

In keeping with UOP's highest priority to date, a substantial portion of the program's outreach capacity has been directed to DIYers, emphasizing the need to bring used oil to collection centers rather than disposing of it illegally. Other efforts have been directed at those who purchase oil (including, but not limited to, DIYers), in the hope of encouraging them to select the re-refined product. For reasons discussed in a later section ("Reuse of Used Oil," p. 54), we recommend reconsidering whether efforts to promote the use of re-refined oil by retail customers (as opposed to bulk users such as government agencies and other fleet operators) should be continued.

As previously mentioned, until quite recently the UOP gave no prominence to source reduction as a means of addressing the problem of illegal disposal of used oil. We recommend that the promotion of source reduction (by means such as extending intervals between oil changes through the use of improved oil products, improved filtration options, and/or oil testing) be given a high priority in future outreach efforts.

On the UOP website (www.ciwmb.ca.gov/HHW/Clearinghouse/Premiums), grantees can view the designs of items such as premiums, brochures, and posters to obtain outreach ideas. However they cannot download the artwork because it would take up too much memory. Grantees must contact the grant manager for the jurisdiction that designed the premium to obtain copies of the artwork (provided the originating grantee still has it). We were told that the UOP staff is currently working with CIWMB's webmaster to make existing and future oil recycling outreach art downloadable by all grantees. More generally, though there is currently no section on the UOP website that highlights successful grantee projects, UOP staff apparently plan to develop such a section in the next year.

Based on these findings and our comparison of the UOP's outreach efforts to those made by other State agencies, we recommend that the former develop an outreach infrastructure that more easily enables sharing of information, tools, and resources among grantees. As previously mentioned, we encourage staff to seek modification of the existing grants database on the CIWMB public website so that it becomes a centralized source of information about programs and their effectiveness. We also encourage them to develop other means for grantees to learn from one another's outreach efforts and to access statewide information (as in the tobacco program).

Posting the originator's contact information beside each Clearinghouse item would make the latter more easily replicated by grantees so they do not have to "reinvent the wheel." Furthermore, as in the bottle-can program, elements such as radio ads, TV commercials, print ads, and posters should be created that can easily be downloaded and "tagged" with local drop-off information.

The current local and statewide message broadcast by grantees and UOP staff to the public throughout the state consists of the used oil drop accompanied by the words: "Recycle used oil and filters. Call 1-800-CLEANUP to locate the collection center nearest you." Some grantees add other information such as the actual addresses of certified collection centers or the date and

location of a special collection event. **We recommend that UOP develop a more cohesive and compelling statewide recycling message.** A more memorable message should be created for the outreach campaign, with "personality" added to the message to go beyond just "recycle used oil." UOP should then implement a marketing campaign to get the renewed message out to local media and clean water advocacy groups.

We recommend that the UOP establish public-private partnerships to extend the recycling message. For example, the UOP should work with auto supply stores to incorporate the used oil recycling message with their oil advertising (recognizing that this is already done to a certain extent by some grantees). UOP should also work with oil makers to attach "prompts" to oil containers, reminding people to recycle their used oil. These prompts could be printed on the container itself or attached with a hang tag. Hang tags could be two-sided with a recycling message on one side and a coupon on the other. The coupon would be redeemable if the oil were returned to an auto shop that accepts used oil. This promotion should be targeted to those areas with sufficient drop-off locations.

In addition, UOP should: find other ways to take advantage of point-of-purchase to remind customers about returning used oil, partner with nonprofits such as the Surfrider Foundation and Adopt-a-Waterway, and create a task force, similar to the traffic safety program, consisting of media, private corporations, environmental groups, and other stakeholders to involve them in the process of increasing used oil recycling.

Community-Based Social Marketing: Going back as far as 1980, to a workshop on source reduction that was held by the then-Solid Waste Management Board (Conn, 1980), ¹³ there has been an interest in applying the concept of social marketing to affect the behavior of Californians with regard to waste generation and management. Without being coercive (as would be the case, for example, with direct regulations), social marketing goes beyond information campaigns that utilize education and/or advertising to encourage behavior change; specifically, what is now called "community-based social marketing" (CBSM) "is based on research in the social sciences that demonstrates that behavior change is most effectively achieved through initiatives delivered at the community level which focus on removing barriers to an activity while simultaneously enhancing the activity's benefits" (McKenzie-Mohr, n.d., first page).

Skepticism about this approach was expressed by a small number of interviewees (UOP staff and grantees). Nevertheless, priority program points were added by the Board in the selection process for both nonprofit grants (5th cycle) and opportunity grants (7th cycle) for applications that proposed to use social marketing techniques. In addition, a contract was awarded in 2003 to California State University, San Marcos, to conduct several CBSM pilot projects, which are currently underway. We believe that community-based social marketing offers a very promising approach to achieving the particular goals of the UOP, and we recommend that if the pilot projects provide evidence in support of this belief, the Board should actively encourage the wider implementation of CBSM by grantees and continue to include it as a program priority. Furthermore, since most grantees currently lack expertise in social marketing techniques, the Board would also need to provide adequate training and support (such as literature, workshops, and possibly access to a qualified consultant who could provide technical assistance and troubleshooting for ongoing projects).

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¹³ The Solid Waste Management Board existed prior to the establishment of the Integrated Waste Management Board.

Grade School and Community College Education

The UOP, in partnership with other Board Offices, has invested significant resources in educational efforts targeted at primary and secondary school children. The K-6th grade curriculum, *Closing the Loop: Exploring Integrated Waste Management and Resource Conservation* (CIWMB publication #322-99-009), addresses current waste management issues, including used oil recycling, and encourages students to explore their natural environment through personal and community action projects. According to a member of the Office of Education and the Environment (OEE) staff, *Closing the Loop* is to be edited and then converted to web pages to make the content more user-friendly and less intimidating for teachers. However, the editing is currently on hold due to staffing constraints resulting from OEE's new grants program and other legislatively mandated efforts. The existing curriculum materials were described as being quite lengthy and containing extraneous information that could be eliminated.

The grade 6–12 curriculum, *Earth Resources*—A Case Study: Oil (pub. # 322-00-014), features over 18 lessons that enable students to learn about the life cycle of natural resources, using oil as a case study. An OEE staff member described *Earth Resources* as being a "tough sell." The demand for teacher training in this area has been weak, and the limited workshops that have been conducted have received less than enthusiastic responses from teachers. One possible explanation mentioned by the staff member is a lack of active promotion in recent times by the Board. The emphasis on STAR testing in California has also given teachers less time to utilize supplemental curricular materials.

To a large extent, teachers' curricular choices are driven by State educational standards that specify what material has to be covered. Some parts of *Closing the Loop* and *Earth Resources* are well matched to the latest standards, but others are less so. While connections can be made between particular lessons and the standards that they meet, there are no plans to revise the curricula entirely to achieve a better match.

As far as we know, there has not been any systematic assessment of the impact of either CIWMB curriculum on student learning or behavior. Although in principle it should be possible to apply systematic assessment techniques to gauge the outcomes and effectiveness of these efforts, in practice this may be difficult or impossible to achieve. This is both because of the likely reluctance of teachers to devote even more time to this particular area and because the outcomes sought go beyond short-term acquisition of knowledge to include students' present and future behavior now, as well as their possible influence on others, such as parents.

As previously mentioned, UOP funds are now being used, again as part of a larger Board commitment, in the support of a new OEE initiative, the *Environmental Ambassador Pilot Program*. This program is specifically intended to utilize environmental education as a means to environmental action and will incorporate the application of rubrics for student assessment.

Used oil funds have supported the development of other curricula by local jurisdictions. Listed in an *Environmental Education Compendium for Integrated Waste Management and Used Oil* (pun. # 502-93-001) on the OEE website are a grade 4–6 curriculum entitled *Every Drop Counts*, comprising lessons specific to San Diego County, and a secondary level curriculum entitled *Oil's Well That Ends Well*, attributed to the City of Fremont. There appears to be no easy way of knowing how many other educational products may have been developed at the local level by used oil grantees, and to what effect.

We recommend that the UOP continue to improve the educational component by making existing materials easier for teachers to incorporate into mainstream curricula, including community colleges and vocational schools. UOP might also consider producing an educational video,

similar to the Surfrider Foundation video, to supplement curricular materials. The video needs to be both entertaining and educational. This may be especially appropriate for junior high school-level teachers, since this group has been slow to adopt the existing used oil education materials.

Through a contract with UOP, Shasta Community College recently developed a supplemental curriculum entitled *Proper Automotive Waste Management* for high school and community college automotive teachers and students. This teachers' guide, resource manual. and student workbook promote all aspects of environmentally sound automotive waste management, including proper used oil/filter disposal and waste reduction. The objectives of this program are more directly related to proper disposal of used oil and/or filters, as these students may be DIYers themselves. In addition, some will pursue careers in which they will be able to promote proper disposal of used oil and filters as well as the use of re-refined oil.

Website

Since our study was begun, the UOP website (www.ciwmb.ca.gov/UsedOil/) has been redesigned. Previously, the UOP pages had not reflected the style and format of other CIWMB web pages. Now they are more consistent with the CIWMB pages. The UOP home page carries the full-color photographic masthead representative of the State, while the subsidiary pages carry a simpler masthead without graphics. The new UOP home page is simpler than the previous one, with less text and fewer direct links to other pages. An added feature is an insert titled "Program News" that contains links to selected program topics of interest to the public.

In our opinion, the former UOP home page was quite good, but the new one is visually more attractive and, being less cluttered, is a little easier to navigate. In general, information seems easy to find, although, as previously stated, no summaries or assessments of the outcomes of past grants and contracts are yet available (on the website or, to our knowledge, anywhere else). We also found it relatively difficult to locate the latest used oil recycling rate annual report as well as the most recent used oil recycling rate biannual reports. No direct link to these reports (or to used oil recycling data and analyses more generally) is provided on the UOP's home page, and it is not immediately obvious that one needs to look at the bottom of the UOP web page entitled "General Information," to find the used oil recycling rate annual report. Running a search of the CIWMB site from the home page, using the title of the annual report, produces a number of other links in addition to the one being sought.

We believe that the news insert is a useful addition which, if regularly updated, may encourage those with an interest in the program to visit the website more frequently. Notwithstanding the exceptions noted above, the UOP website as a whole contains a great deal of helpful information. Interviewees especially liked the "find your certified center" utility.

On checking the CIWMB website, we found that, for the most part, appropriate links to the UOP pages from other pages exist, so that the public can easily access the UOP pages. However, at the time of our study, such links were missing from a few pages where they might be expected, such as certain web pages addressing waste reduction and market development, and the home page of the Office of Local Assistance (www.ciwmb.ca.gov/OLA/).

We recommend that, if the above-identified problems with the UOP and other CIWMB websites still exist, they be resolved by the installation of additional links, as appropriate.

ADA Compliance: The UOP home page was assessed for compliance with the Americans With Disabilities Act (ADA) using Watchfire *Bobby* software. Although the software identified some possible problems in meeting the requirements for both *Bobby AAA Approved* status (based on WAI Content Accessibility Guidelines 1999/05/05, Support Level AAA) and *Bobby Section 508 Approved* status (based on U.S. Government Section 508 Guidelines), the software also pointed

out that none of these problems were automatically detectable; rather, the runs merely signified the desirability of a "manual" check to confirm whether the page is indeed out of compliance. We believe that the UOP home page does not pose a significant challenge in regard to accessibility, and that ADA compliance is not likely to be a significant issue in this case. ¹⁴

Inspection and Enforcement

Inspection and enforcement of hazardous waste regulations as they apply to used oil haulers and facilities are handled by the Department of Toxic Substances Control (DTSC). The CIWMB contracts with the DTSC to supply funding for this purpose from the Used Oil Recycling Fund. Our study did not examine this aspect of the Used Oil Program.

Program Objective

"... to reduce the illegal disposal of used oil and recycle and reclaim used oil to the greatest extent possible."

Source Reduction

Source reduction (otherwise known as "waste reduction" or "waste prevention") is "any action undertaken by an individual or organization to eliminate or reduce the amount or toxicity of materials before they enter the municipal solid waste stream. This action is intended to conserve resources, promote efficiency, and reduce pollution." ¹⁵

In light of the priority attached to source reduction by the Board, this option is conspicuous by its lack of prominence in the CORE Act. Instead, the Act's primary emphasis (reflected in the UOP's main activities to date) has been on establishing local used oil collection programs and other components of a comprehensive system for used oil collection and recycling.

A number of source reduction options would seek to reduce the rate at which used oil is generated and thereby lessen the problem of improper used oil disposal. One option would be reducing vehicle miles traveled. Another would be extending the life of oil before it becomes "used." Specifically, there appears to be potential for extending intervals between oil changes by a variety of means including improved oil products, improved filtration options, better promotion of these products, and testing oil before replacing it. However, it has been suggested by a UOP staff member that there might be an issue in relation to the inadvertent voiding of manufacturers' warranties on automobile engines. If so, we believe that the Board should consider taking the issue up with the manufacturers themselves.

Recent advances in oil filtration technology could provide the means to extend oil life under some conditions. The UOP recently contracted with the Department of Toxics Substances Control (DTSC) to evaluate the use of high-efficiency filters in State fleets. In a recent submission to the Board, ¹⁶ UOP staff conservatively estimated that the use of high-efficiency filters in the State fleet alone would reduce the generation of used oil by 100,000 gallons per year. However, more research in this area is needed as driving conditions can also limit oil life regardless of the use of an extended-life oil filter.

DTSC has also recently promoted oil testing to auto repair technicians as a means of extending oil life. Oil testing measures the level of dirt and decline of additives in used oil, allowing technicians to determine when oil has become compromised enough to require replacement. A

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¹⁴ Based on an examination of a sample of the UOP's subsidiary web pages, we believe that this is true also of most, if not all, of these pages.

¹⁵ This definition was adopted by the Board in 1993.

¹⁶ CIWMB Board Meeting June 17–18, 2003, Agenda Item 16.

significant barrier is that the cost of an oil analysis can often exceed the cost of a complete oil change. Furthermore, oil testing equipment for auto shops is currently quite expensive and repair technicians would appear to have little incentive to invest in this equipment when they can increase profits by replacing used oil with fresh oil.

We recommend raising the priority given to exploring and advocating source reduction alternatives, such as extending intervals between oil changes. Additional research, in conjunction with funding from other related State agencies such as the Air Resources Board, the California Department of Transportation, and the California Energy Commission, could be done on promoting benefits of driving fewer miles.

Diversion and Recycling of Used Oil

Quantities of Used Oil Diverted and Recycled

For the purposes of the following discussion, references to "public" oil collection relate to oil collected from individuals not affiliated with a business and conditionally exempt small-quantity generators (CESQG), which are businesses that generate less than 100 kilograms, or 27 gallons, of oil per month.

The UOP derives the total quantity of used oil collected from the public via data collected from four major sources:

- 1. Reimbursement claims for oil collected by certified collection centers (which receive recycling incentive payments for collecting used oil from the public as well as for used oil that they themselves generate—for example, by changing oil for paying customers).
- 2. Reports of used oil collected from the public by non-certified centers (curbside, marina, agricultural, municipal recycling facilities, and others).
- 3. Reports from household hazardous waste recycling facilities that collect public oil (facilities complete CIWMB's form 303 on household hazardous waste collection information).
- 4. Collection reports from used oil haulers for all of the above.

These data are then corroborated by comparison with used oil diversion reports from local government grantees that obtain oil collection figures from CCCs and non-certified centers in their respective jurisdictions. The oil collection data that appears in Table 7 and Figure 1 below are taken from the UOP's 2002 used oil recycling rate annual report (*Used Oil Recycling Rate Annual Report: 2002, 2004*). Total lubricating oil recycled is compared to total lubricating oil sold by oil manufacturers (or the entities first to take title to the oil for sale, use, or transfer). For analytical purposes, actual data are reported in the used oil recycling rate annual report without adjustment for burn-off.

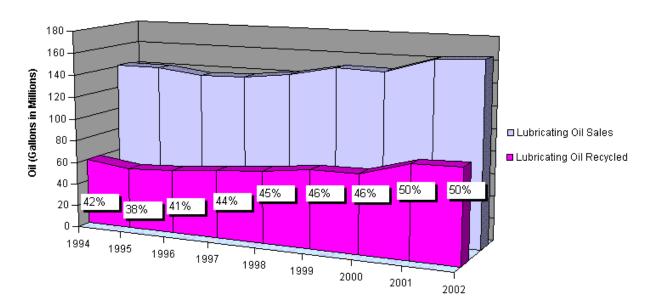
Table 7: Annual Lubricating Oil Sales and Used Oil Lubricating Recycling Rates (gallons in millions)

	1994	1995	1996	1997	1998	1999	2000	2001	2002
Lubricating Oil Sales	141.2	140.8	136.2	137.5	142.1	150.3	149.2	162.3	164.8
Lubricating Oil Recycled	59.9	54.6	56.8	60.9	64.5	69.2	70.1	81.9	83.1

^{*} Includes California used oil recycled both in and out of California.

Figure 1: Amount of Lubricating Oil Recycled as a Percentage of Sales (Calendar Years 1994–2002)

Source: CIWMB



UOP staff responsible for used oil recycling analysis have recently expressed confidence that these data are quite accurate, given that reports from the various sources match reasonably well. Earlier in the study, we heard from a few other staff members who were more skeptical about the quality of the data, but efforts to improve this quality appear to have been stepped up in the past year or so. This issue is revisited in a later section of the report.

The data suggest that the amount of lubricating oil recycled has been growing steadily, at least since 1996, more than keeping pace with the increase in sales. For a pre-CORE Act comparison, we note that a 1986 report entitled *Used Oil Recycling in California* stated that "an average of 45 percent of the available used oil generated in California has been recycled annually over the past seven years." (*Used Oil Recycling in California*, 1986, p. 3) At that time, "available used oil" was considered to be 57 percent of oil sales, based on a study by the Aerospace Corporation. (*Utilization of Used Oil*—cited in *Used Oil Recycling in California*, 1986, p. 6). Thus, based on the figures in the report, the amount recycled during those seven years averaged a little more than a quarter of the amount sold. It is important to note, however, that in 1986 there was little if any direct reporting of used oil disposal. At best, there were merely estimates.

With regard to the collection of used oil from the public, Figure 2 displays estimates that differentiate between (1) used oil placed on the curb by DIYers for pickup by residential waste haulers (curbside collection program), (2) used oil disposed by DIYers at local government collection sites and household hazardous waste collection events (reported on Form 303), and (3) used oil collected by automotive part stores and professional oil changers that have become certified collection centers.

The numbers show that the quantity of used oil collected from the public has increased, particularly from certified collection centers. However, CCCs include so-called fast-lube stores whose own oil-changing operations are known to have increased significantly in recent years. Oil reported on Form 303 and from curbside collection, as well as that collected at auto parts stores,

is thought to come mostly from DIYers. Oil from fast-lubes, on the other hand, is thought to consist of 1–3 percent or less from DIYers, and this percentage may be decreasing, although the exact numbers are unknown. According to the SFSU study, the proportion of DIYers relative to the total population is thought to have decreased from 24 to 19 percent between fiscal years 1993/94 and 2000/01. However, the total number of DIYers remains about the same.

Figure 2: Collection of Used Oil From the Public

Source: CIWMB

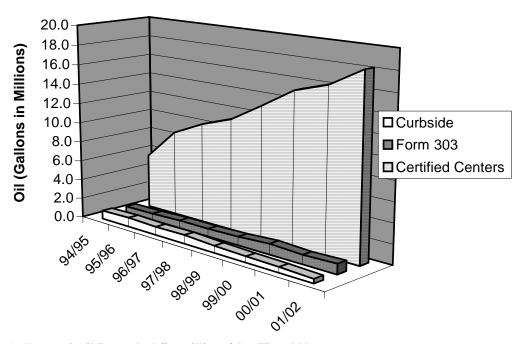


Table 8: Gallons of Oil Recycled (in millions) by Fiscal Years

Collection Type	1994-95	1995-96	1996-97	1997-98	1998-99	1999– 2000	2000–01	2001–02
Curbside	0.9	0.9	0.8	0.9	0.7	0.6	0.5	0.4
Form 303*	0.6	0.7	1	0.8	0.9	1.1	0.9	1.0
Certified Centers	5.6	8.7	10.2	11.3	13.2	15.2	16.3	18.1
Total Oil	7.1	10.3	11.8	13.0	14.8	16.9	17.7	19.5
Total Oil (percent change)		45.0	14.6	10.2	13.8	14.2	4.7	10.2

^{*} CIWMB's Form 303 pertaining to household hazardous waste collection information

It is interesting to make rough comparisons of the oil collection data for California with those of other states. One should bear in mind that—quite apart from any inaccuracies in measurements—there may also be differences in definitions, reportable categories, etc., resulting in numbers that, to some extent, do not have a common base of comparison. Nevertheless, it is noteworthy that, in Florida, Maryland, and Utah, according to these states' own estimates, the numbers of gallons of DIYer-generated used oil diverted from the waste stream annually in the three states, *divided in each case by the state population*, are lower than the per capita number for California, but of a similar order of magnitude.

Estimated Gallons of DIYer-Generated Lubricating Oil Diverted From Waste Stream Annually

Florida: 0.18

Kentucky: Unknown Maryland: 0.15 Utah: 0.22

California: 0.26

In areas such as dollars expended and staffing levels, California's program is considerably larger than those in the other three states; however, unlike these other states, California regulates used oil as a hazardous waste. This poses a challenge to the UOP, since it means that the handling of used oil by entitites such as CCCs, haulers, and recycling facilities, is significantly more costly. Also, businesses that volunteer to collect used oil from the public and used oil haulers that transport used oil face more potential liability.

Reuse of Used Oil

A recent peer-reviewed study (Boughton and Horvath, 2003, p. 3) stated that 92 million gallons of California-generated used oil (including both lubricating and industrial used oils) were managed in-state during 2002. The result was close to 8 million gallons of lubricating oil base stock (by re-refining), over 13 million gallons of marine diesel fuel (by distillation), and almost 50 million gallons of fuel oil, together with more than 17 million gallons of asphalt-related products. ¹⁷

Other things being equal, the re-refining of oil is thought to offer the greatest potential for natural resource conservation, while also creating the least environmental damage. It is widely reported that less energy is required to produce a gallon of re-refined base stock than a base stock from crude oil. However, market factors, including the price of competing (virgin) base stock, transportation costs, and consumer demand, are critical in determining how much re-refining is likely to occur in practice.

Interviews with industry representatives led us to believe that plant capacity is currently the major constraint on re-refining oil in California. State regulators treat a re-refining plant as a hazardous waste facility, making the permitting process especially lengthy and demanding. As a result, efforts to double pre-existing capacity have taken about 10 years so far. In the meantime, most of the used oil collected and processed in California currently ends up being burned, in one form or another, as a fuel.

Industry representatives seem confident that, up to a point, the market would absorb more rerefined oil if the capacity to produce it were expanded. Currently, re-refined base stock is used in several ways, including:

- 1. To produce a re-refined lubricant that is labeled and marketed as such, in bulk or as a consumer product.
- 2. Through "invisible" blending with virgin base stock, to produce "house brands" of lubricant for particular companies (such as the fast-lubes); these house brands are not labeled or marketed as re-refined.

¹⁷ According to Boughton and Horvath, whereas the lubricating oils were used to make all of these products, the industrial used oils (less than one-fifth by volume of the total used oil recycled) were distilled to produce marine diesel fuel and asphalt-related products.

3. Also through blending, to produce a commodity lubricant that is not labeled or marketed as re-refined.

While federal regulations do not allow virgin oil to be advertised as re-refined, they also do not require disclosure of the fact that oil contains or largely consists of re-refined base stock. 18 This is important because the re-refined product (if identified as such) is often seen as inferior to "virgin" oil, even though the former normally meets all of the same strict performance specifications of the American Petroleum Institute.¹⁹

Given both consumer resistance to using oil labeled as re-refined and the ability to blend rerefined base stock "invisibly" into a house brand or commodity lubricant, it is appropriate to give some consideration to abandoning all efforts to promote re-refined oil as an explicitly labeled product. However, there are several factors that argue against this. One is that the market for rerefined base stock that is to be blended invisibly cannot always be assured. Other things being equal, it is likely to be purchased for blending as long as its price is below that of the competing virgin stock. However, virgin oil manufacturers often provide incentives and discounts in order to increase their market share, and this distortion of the market reduces the demand for re-refined base stock.

Another factor, ironically, is the existence of procurement preferences or requirements that favor the use of re-refined oil. The U.S. government, for example, requires federal agencies to follow EPA guidelines for the procurement of re-refined oil, 20 while California State agencies and the Legislature are required to meet "recycled content" requirements for lubricating oil under the State's "Buy Recycled Campaign." As long as these preferences or requirements are in place, it is in the interest of re-refiners to market a portion of their product explicitly as re-refined.

The UOP's primary focus to date has been on diverting used oil from the waste stream, and it has tended to let the market determine how the oil should subsequently be reused. Indeed, several of the present and former staff interviewed said they lacked confidence in the ability of any State agency, including the CIWMB, to significantly influence the direction of the market. Not all of the staff agree with this, however, and over the years the UOP has—consistent with the CORE Act—undertaken a number of initiatives to promote (in particular) re-refining, as well as encouraging local government grantees to do the same.

For example, the program supported two statewide series of workshops in 1995 and 1996 which were focused on oil reuse, with a particular emphasis on the re-refining process and the quality of and market for re-refined lubricants. These workshops, organized by University of California Extension, were aimed at recycling coordinators, local government planners, vehicle fleet service managers, State and federal agency procurement managers, and others interested in recycling issues. In addition, the UOP and its grantees have prepared and distributed informational and promotional materials regarding the re-refining process and have promoted the purchase of rerefined oil to State and local government fleets. According to a publication that appears in UOP's Local Program Resource Binder, block grant funds may be used to offset the difference in cost

¹⁸ Title 16, Code of Federal Regulations, sections 311.1, 311.3, 311.4, and 311.5.

¹⁹ It is difficult to counteract this perception, though the UOP has tried to do so in various ways: (1) At one time it awarded a grant to promote re-refined oil using a NASCAR vehicle. (2) Grantees sometimes hand out quarts of rerefined oil as premiums. (3) Re-refined oil has also been promoted to a limited degree in the private sector; for example, until recently, new Mercedes came filled with re-refined oil as a standard (although we understand that this is no longer the case).

²⁰ Executive Order 13101, section 507, Sept. 1998.

²¹California Public Contract Code (PCC) sections 12200–12320.

between re-refined oil and virgin oil. (*Re-Refined Motor Oil* [supplement], 1997, p. 9). ²² Local government grantees have also promoted re-refined oil use to DIYers at retail outlets.

Many of the UOP re-refined oil promotional materials are available on the UOP's website. They reflect a substantial effort to obtain, analyze, and present information concerning re-refining and the use of re-refined lubricants (although it appears as of mid-2003 that the extensive information regarding, for example, sources of re-refined lubricants has not been updated for some time). The Board has recently awarded contracts to promote the use of re-refined oil by fast-lube stores and to educate fleet managers within the government and private sectors about the benefits of purchasing re-refined oil.

Taking all of the above into account, we recommend continued and possibly increased efforts by the UOP to promote re-refining over other means of reusing used oil. In particular, we recommend that the UOP partner with industry in exploring the options for expanding re-refining capacity in California, beyond the expansion for which permits are currently being sought.

The UOP should also explore whether it is desirable and/or possible to improve the marketability of re-refined oil as a feedstock for blending into undifferentiated products. (As previously mentioned, industry now blends, but to what extent is unknown, as the data are confidential.) Companies willing to document their use of re-refined oil in this manner could be recognized (for example) in an "environmentally friendly" award program, and they might reap benefits in the stock market from environmentally motivated investors.

Consideration should be given to the possible advantages of terminating existing procurement requirements for explicitly labeled re-refined oil, since there may be better ways of promoting re-refinement. However, as long as these requirements remain in place, at federal and/or State levels, a portion of re-refined product is likely to be explicitly labeled and marketed as such. Under these circumstances, we recommend continued efforts to promote the use *in bulk* of this product by fast-lube stores and fleet managers (in both public and private sectors). On the other hand, because of the difficulty of overcoming the stigma attached to re-refined oil in some people's eyes, and because we believe it is not essential to ensuring an adequate market for the product, we do not recommend continued efforts to promote the sale of explicitly labeled re-refined oil directly to retail customers.

Ultimate Legislative Goal

"Recover valuable natural resources and...avoid damage to the environment and threats to public health."

Natural Resources

The illegal disposal of used oil is clearly a waste of natural resources. A finding in the statute is that "an abundance of used oil recycling alternatives exist which have been demonstrated to be environmentally safe." (PRC section 48600) Overall, the Board's best estimates suggest that the total amount of used lubricating oil collected annually in California and recycled in-state or out-of-state increased almost continuously from 59.9 million gallons in 1994 to 83.1 million gallons in 2002 (Used Oil Recycling Rate Annual Report: 2003).

However, the resulting savings in natural resources are difficult to quantify. As previously mentioned, a recent publication focuses on the California-generated used oils (lubricating and

²²Interestingly, current UOP staff seemed unfamiliar with this provision, although it is clearly stated in the "Rerefined Lubricants" chapter of the UOP's *Local Program Resource Binder*.

industrial) that were managed in-state during 2002, estimated by the authors to be 92 million gallons. The following table indicates the methods employed and products created, each of which represents a potential saving in natural resources if used to substitute for products from virgin sources. Note that, because of strict air pollution requirements within the state, most of the fuel produced in California from used oil is shipped out-of-state for burning.

Table 9. In-State Management Methods for California-Generated Used Oils

Management Method	Product (1)	Product (2)
Fuel oil	Fuel oil (cutter stock)	
48.9 million gallons	49.5 million gallons*	
Distillation	Marine diesel oil (MDO) fuel	Asphalt flux
31.7 million gallons	13.3 million gallons	15.8 million gallons
Rerefining	Lube base stock	Asphalt extender
11.4 million gallons	7.9 million gallons	1.9 million gallons

^{*.6} M gal of gas-oil from rerefining are added to cutter stock.

Source: Adapted from Boughton and Horvath, p. 354.

Protection of Public Health and the Environment

Damage due to illegal disposal of used oil

In order to assess the UOP's success in protecting public health and the environment, it is first necessary to gauge the extent of damage caused by the illegal disposal of used oil. The statute makes assertions about the quantities of used oil not recycled and the environmental damage caused thereby. It refers to used oil as a "potential source of stormwater pollution." Although there appears to be a significant gap between the quantities of oil sold and those recovered, and a significant number of Do-It-Yourselfers (DIYers) have admitted to illegal disposal practices, our inquiries—though not extensive—revealed very little evidence on the extent of the damage caused by these practices and no evidence on the extent to which the UOP has reduced this damage.

A check of data reported by the State Water Resources Control Board (SWRCB) as well as inquiries to staff of the SWRCB, the Department of Fish and Game, and selected environmental groups, elicited nothing useful beyond a confirmation that polyaromatic hydrocarbons (PAH) have been identified in stormwater in the Los Angeles and San Francisco regions but not throughout the state. (www.swrcb.ca.gov/tmdl/303d_lists.html) If oil were present, it would be expected to show up in the form of PAHs. However, even if these PAHs indicate the presence of oil, the origin of this oil is not specified. The oil could, for example, come mostly from vehicle leaks rather than illegal disposal practices.

Fact sheets on the potential damage from illegal disposal of used oil (including one on the CIWMB's own website) typically emphasize that small amounts of oil can have significant environmental impacts, such as tainting the taste of drinking water, forming a light-blocking slick on the surface of waterways that depletes the supply of oxygen to waterborne organisms, and interfering with sewage treatment processes. However, our inability to find measured evidence of these kinds of impacts suggests that very little or no monitoring of oil impacts has occurred. The actual damage resulting from illegally dumped oil also may be considerably less than the

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²³ Public Resources Code section 48600(b).

potential damage because oil tends to be "trapped" by adsorption to other substances and sediment both on land and in water. Oil also adheres to garbage landfills, and modern lined landfills are quite efficient at preventing the escape of leachates into underlying soil.

Damage due to burning used oil

As mentioned above, about one-half of the used oil generated in California annually is burned as a fuel, mostly out-of-state (and much overseas). Boughton and Horvath's life cycle analysis published in 2003 states that the combustion of used oil as a fuel, without emission controls, has the *potential* of causing significant emissions of heavy metals, notably zinc, lead, copper, and cadmium—as much in 2002 as reported total stationary source emissions statewide. (Boughton and Horvath, 2003, p. 356) In practice, however, some of the emissions are reduced by means of controls, and a portion are thought to occur away from significant human populations (for example, at sea). The actual damage to human health and the environment, if any, is currently unknown. Boughton and Horvath conclude that "on the basis of potential human health and environmental impacts, used oil re-refining and distillation are significantly better management practices than combustion of used oil as a fuel."

One potential source of heavy metal emissions in-state could be large ships docked in California ports that are fueled by a mixture of bunker fuel with 1–5 percent used oil. The Office of Environmental Health Hazard Assessment is currently using used oil funds to try to quantify the heavy metal emissions created by burning used oil in ships docked at California ports.

Damage overall

Overall, we conclude that, while the illegal disposal of used oil by DIYers and others might be expected to cause damage to human health and the environment, there exists little or no systematically documented evidence of the extent of used oil-related damage before or after California's Used Oil Program was introduced. It is important to emphasize that we are not denying the possibility, or even the likelihood, of such damage. Rather, we are pointing out that our knowledge base in this area is very incomplete and that, as a result, it is impossible for us to fully assess the extent to which the UOP is achieving its ultimate goals. **Consequently, we recommend that more research be done on damage to human health and the environment caused by illegal disposal of used oil by DIYers and others**.

Recognizing the possibility that leaked oil from vehicles entering stormwater could be a significant contributor to water pollution, the UOP has three research, testing, and demonstration grants currently underway that will (1) determine the amount of surface oil that various commercial sites in Los Angeles and La Mirada contribute to stormwater run-off (two separate grants) and (2) test the ability of oil-adsorbing storm drain filter inserts to trap this oil. We recommend continued attention to the relationship between used oil leakage, stormwater runoff, and pollution.

Further Issues

Strategic Planning

When enacted, the CORE statute gave the Board nine months to develop and adopt a used oil program. At the time (1992), the Board had not yet produced its first strategic plan, which was adopted in the following year. Although the UOP carried out some elements of the Board's planning process, such as workshops and other consultation with stakeholders, these did not result then (or since) in a formally adopted plan for the program.

We found some confusion among staff about the goals and priorities for the program overall, as well as for the individual divisions. Most were aware of the broad goals that appear in the statute but were less clear about specific goals and objectives. Furthermore, for the most part, staff were not convinced that the Used Oil Program had figured significantly in the formulation of Board's strategic plan, especially earlier versions. There is no specific reference to used oil collection goals or reduction of liquid hazardous waste in the Board's latest (2001) strategic plan, though it does place greater emphasis on waste reduction and recycling than the previous plan, reflecting more of the UOP's interest.

The scope of work for this comprehensive assessment indicates that a five-year plan will be prepared for the UOP itself. We strongly recommend the preparation of a strategic plan for the UOP. A well-designed planning process could (among other things) be a way of bringing staff together and binding them more strongly to a common purpose. We recommend that, early in the process, staff be involved in defining and/or clarifying both broad and specific goals and objectives for the program and its constituent parts. These should reflect the broader interests found in the Board's 2001 Strategic Plan.

Data and Analysis

UOP analysis staff expressed growing confidence in their numbers on which analysis of the program's performance is based, in part because they are comparing oil collection data from multiple sources. This is an encouraging development, since both former and present UOP staff interviewed expressed concern about the accuracy of the oil collection data tracked by staff. The growing confidence can be attributed to comparing annual block grant reports which list total gallons of used oil/filters collected locally (grantees derive totals from certified and non-certified center oil hauler receipts and/or claims data from the UOP) with quarterly claims data collected by the UOP consisting of all oil reimbursement claims paid by CIWMB to oil collectors; and Form 303 data submitted by local jurisdictions to the UOP which total their annual collected hazardous waste (including oil). UOP staff cross-check these data by comparing the quantities of used oil reported by collection centers to those reported by the recycling facilities to which the used oil is shipped.

As with any data collection process, some discrepancies in the data are expected due to the use of less accurate versus more accurate methods of measurement (for example, estimating numbers of filters in a drum versus counting them individually) as well as inaccuracies in data entry. We were told by haulers that quantities reported on manifests are expected to be accurate to within plus or minus 10 percent.

Oil collected by DIYers is more difficult to assess than total oil collected. Some collection centers collect oil only from the public. But fast-lube and auto repair facilities typically mix oil from customers and oil from DIYers in the same tank and are not required to differentiate in their reporting between used oil collected from the public and used oil generated by their own operations. For this reason, the UOP does not include DIYer oil collected from these types of facilities in its DIYer oil collection data, although this oil is estimated to constitute 1–3 percent of the total collected by fast-lubes (possibly somewhat more for auto repair shops). Thus DIYer oil collection totals in UOP annual reports are thought to be conservative estimates of the actual DIYer oil collected.

The UOP has recently begun to analyze the outcome of competitive grant cycles and the project performance of grantees. The UOP staff is implementing a new process of analyzing grant project outcomes at the end of each grant cycle and using that analysis to shape future grant cycle criteria and project emphases.

In view of workload and other constraints, we recommend that the staff continue to be selective in pursuing and analyzing appropriate data in a manner most likely to lead to program improvement. We believe that this has been the staff's intent in the past and remains so today, but the staffing cuts and the lack of a consistent, systematic, and adequately supported strategic planning process has made staff members' work more difficult.

Measuring Programmatic Success

Since the current program places the greatest emphasis on the diversion of used oil, and focuses largely on DIYers, it is not surprising that until now the success of the program has been gauged to a large extent in terms of estimated quantities of used oil collected, relative to sales of fresh ("virgin" and re-refined) lubricating oil. The UOP has also given increasing attention to the numbers of used oil filters collected, relative to the numbers sold. We recommend that the Board consider establishing diversion goals for block grantees and/or measure performance against state averages in order to identify poorly performing jurisdictions that should be targeted for technical assistance.

Collecting oil/filter diversion data only partially measures the success of the UOP. Its success should also be measured by determining which grant-funded programs provide used oil collection infrastructure, most effectively educate the public about used oil recycling, and divert the most used oil and filters per capita within each jurisdiction. The UOP can also measure its own success by how well staff has promoted successful models to grantees. The UOP staff has already begun this process and we encourage them to increase this type of assessment.

Some grantees interviewed identified other measures of success, such as numbers of collection centers established, numbers of oil collection containers handed out, and numbers of visits to schools or other locations for education/outreach. Grantees are now being asked to provide such numbers in their annual reports but statewide compilations have not yet been developed.

Furthermore, these are all measures of *inputs* (actions taken) rather than *outcomes* (such as to what extent the illegal disposal of used oil is prevented, virgin oil is conserved, and environmental damage is avoided). Some of these outcomes may be impossible to measure at present because they will occur in the future, such as when children who are exposed now to educational initiatives at school ultimately enter the DIY population. Although we could attempt to track attitudinal change, the link between attitude and behavior (present or future) is notoriously difficult to predict.

In addition to continuing to collect and attempting to refine these data, we recommend that the UOP increase the attention given to qualitative information (for example, stormwater pollution prevention research and water pollution monitoring results) regarding the extent of, and damage caused by, illegal used oil disposal. The judgments of appropriately qualified local and State officials, as well as representatives of professional associations and other non-governmental organizations, as applicable, should be taken into account.

We recognize that gathering and analyzing data, and publishing the results, can be difficult and costly, and add to staff workloads. Nevertheless, we recommend that the UOP's regular published reports be expanded to include as wide a range of quantitative and qualitative information as possible (particularly outcomes-related, such as quantities of virgin oil conserved as the result of using re-refined oil), in order to give a more complete picture of the program's achievements.

Organization and Operations

CIWMB/Special Waste Division

The UOP's current location within the Special Waste Division (see charts, previously presented) makes sense from the perspective that used oil is different from most other wastes for which CIWMB has responsibility: California classifies used oil as a hazardous waste and it is regulated by DTSC, while the UOP's role is to promote its recycling. The program is also distinctive within the CIWMB in that it generates a substantial stream of revenue. However, the perception among some people is that the UOP is not a high priority of the Board and UOP has no Board member to champion it.

We note that the UOP has overlapping interests with several other divisions within the CIWMB structure, including the Waste Prevention and Market Development Division; Diversion, Planning, and Local Assistance; and Administration and Finance (especially the Grants Administration Unit). With the exception of the Grants Administration Unit, however, these other divisions were hardly mentioned by those we interviewed. In the future, the UOP could potentially partner with the Waste Prevention and Marketing Development Division to expand market uses for and products containing used oil.

Used Oil Branch

The most recent reorganization of staff in the Used Oil Program no longer separates staff responsible for the certification of collection centers from grant management staff. Irrespective of other duties, virtually all of the staff (including those in the Used Oil Recycling Analysis Unit—RAU) are involved in grant selection and management activities, either continuously or as needed.

As long as the grant program remains the centerpiece of the UOP, the present organization seems to be reasonably effective. However, this emphasis may reinforce the perception that other UOP activities, including not only collection center certification but also statewide education and outreach (which currently falls within the scope of the RAU), are less important than ensuring that grant funds are channeled out to local jurisdictions and other grantees, even though integration of these activities into both block and competitive grant programs is possible to the extent that UOP staff are able to provide technical assistance and guidance to grantees.

During most of UOP's existence, there was a section dedicated to the certified collection center program. Responsibilities of this section's staff included statewide inspections. After program reorganization and due to budget cuts, there remained only one dedicated collection center inspector based in the southern part of the state. Subsequent budget cuts resulted in the elimination of that position. When the CCC section was integrated into the grant management function, inspection of CCCs in the northern part of the state was conducted by grantee staff. The result is that, until recently, centers in the south were much more likely to be visited as part of a systematic State inspection program than their counterparts in the north. Furthermore, we were told that more used oil is collected per capita at centers in the south than in the north (but we were unable to establish whether this can be attributed to the presence of the dedicated inspector). We recommend that the UOP compare the oil collection volume and CCC service to DIYers at CCCs in southern California before and one year after the departure of the dedicated collection center inspector to determine if there is a correlation between dedicated inspection and CCC performance. If there is a positive correlation that is not readily explained in another way, the Board may wish to reassign dedicated CCC inspector(s) to high-priority areas.

Applicability of OOE Findings

In its July 2002 document, "Administration of Grant Programs Assessment Report," the Office of Organizational Effectiveness (OOE)²⁴ issued an assessment of the grant administration function throughout the CIWMB, including the Special Waste Division, of which the Used Oil Program is a part. The principal finding was that "success is due largely to the institutional and grants program knowledge—content and process—held by many of those involved in the administration of grants in the program divisions, Administration and Finance Division (AFD) and the Legal Office. Therefore, access to those who hold this knowledge supports the successful administration of all CIWMB grant programs."

The assessment indicated that the following were among the barriers to effective grant administration:

- Limited or no access to institutional and grants knowledge (e.g., difficult for newer staff to locate and acquire this knowledge; old grant databases—Centralized Automated Mailing List [CAML], Grants Report and Administrative Tracking Information System[GRATI\$]—contain outdated and inaccurate information).
- Policies, processes, and procedures—unclear, missing, inconsistent, inaccurate and/or difficult to interpret and communicate (e.g., conflicting direction given formally or informally by Board members, problems created by attempting to standardize across differing programs, inadequate documentation).
- *Unclear roles and responsibilities* (e.g., roles and responsibilities of program divisions, AFD, and the Legal Office not differentiated).

These findings resonated in our study of the Used Oil Program, with our interviewees making many comments similar to those reported by the Office of Organizational Effectiveness for the CIWMB as a whole.

The first barrier, especially, has presented a significant problem in UOP because of extensive staff turnover, particularly in the past few years. ²⁵ An attempt has been made fairly recently to address the first and second barriers in UOP by means of the program's *Desk Manual for Grant Managers*, a thick binder containing a history/background of grants; administrative materials (phone listings, grant manager map, timeline, etc.); a set of policies/practices; a set of forms; pertinent statutes; a list of databases; a description of the Board Agenda Web Document System (BAWDS); information about certification and registration; attachments for grant packages (terms and conditions; policies and procedures); roles and responsibilities for the cycle lead and team lead roles; and miscellaneous fact sheets. This compilation appears to represent a significant improvement in the communication of institutional knowledge to newcomers, and its recent development may explain why little mention of it was made in our interviews.

Our own observation is that the manual might be rather cumbersome to use; for example, a new manager might not have the time or inclination to read through the many pages that chronicle individual policies and practices. We recommend that the manual be systematically evaluated, taking into account the views of its users, and that the results of the evaluation be used to guide improvements. Consideration might be given to including a summary of

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²⁴ The Office of Organizational Effectiveness is no longer in existence.

²⁵ Possible reasons for the high staff turnover in the UOP were not systematically investigated in this study. Based on anecdotal evidence, it seems that some of the former staff left because of their perception that the program was becoming "more bureaucratic," less focused on its ultimate goals, and generally a less enjoyable place to work.

responses to the key issues that a manager is likely to encounter, especially when first serving in this role. Grantee activities that are permissible—and particularly "best practices" that are to be encouraged—might be given greater prominence than grant expenditures that are prohibited.

We heard comments about the Grants Management System (GMS) which was recently introduced to replace the older databases, such as GRATIS). Although most grant managers seemed, on balance, to prefer GMS, several UOP staff complained that it was implemented before being fully tested and that it has obvious shortcomings because it is not user-friendly and cannot be used without a manual. The existing manual is brief and incomplete and fails to adequately address questions about entering data, running reports, etc. We note that the introduction of a new database of this kind is often accompanied by complaints about user-friendliness, for a variety of reasons: people have to adapt from their previous known and tested ways of operating, which may make them uncomfortable, and the new system may actually be more complicated (for example, requiring more screens) in order to support a more extensive set of functions. Now that GMS has been in operation for some time, we recommend that the Board arrange for an evaluation by its users. Consideration should be given to the possibility of hiring a contractor to both evaluate and prepare a new manual, if the need is confirmed.

A response to the second and third barriers has been the establishment of the Grants Executive Oversight Committee (GEOC), comprised of the CIWMB's deputy directors. The Grants Policy Analysis Documentation (GPAD), comprised of senior managers and staff, conducts analysis of the oversight committee. The GEOC is authorized under certain circumstances to resolve grants-related issues—relating to such matters as the interpretation of policies or the differentiation of roles—that in the past would have been taken to the Board itself. Typically, the GEOC can act in a more timely manner than the Board.

For example, the GPAD and GEOC recently interceded to streamline a grant-related procedure. Several UOP interviewees had earlier expressed concern to us about their perception that the Grants Administration Unit sometimes overreaches in imposing requirements that make little sense to UOP grant managers and/or that they have difficulty in meeting. In this instance, the Grants Administration Unit had required all staff, including UOP staff, to enter into the Grants Management System all comments made by grant selection panel members about proposals being considered for competitive funding. The issue was presented to the GPAD, and eventually GEOC, which decided that only comments made about proposals from private entities would need to be entered into the system. With GPAD and GEOC as the venue for resolving issues, we recommend that all issues and resolutions be systematically documented and categorized by topic on the website so that Board staff will have access to the outcomes for use as a tool.

Staff Workload

The administrative burden shouldered by the UOP staff came across as a significant issue, although apparently not a new one. At any given time, some 600–700 grants are administered by the UOP, with as many as 160 assigned to a single manager. Note that this total includes up to three block grants for each jurisdiction which may be open simultaneously. (Due to the reassignment of several temporary and permanent CIWMB staff from other divisions, and in light of staff concerns regarding equity, the grant management load was recently redistributed as discussed toward the end of this section, with a reduction to around 70–80 grants per manager.)

Board staff are also responsible for the certified used oil collection center program. Currently, around 2,700 certified collection centers are eligible for reimbursement of the recycling incentive. Responsibility is split between the accounting department (to collect the fee and provide

reimbursements) and UOP. When the CCC section merged with the grant management section, two grant managers and four student assistants had responsibility for certifications, renewals, and general inquiries. Most grant managers are no longer involved in the certifications and renewals. Instead, those duties have been apportioned to 20 percent of one grant manager (with a reduced grant workload) and a similar percentage for the staff services analyst. Student assistants still play a key role in the process of certification and renewal.

Simplification of grantee and grant manager reporting requirements and other changes made in the past year have helped to alleviate the UOP staff workload, but the staff allegedly still find themselves struggling to keep up with the paperwork. Grant managers, in particular, complained about their inability to focus as much as they would like on technical assistance to grantees. As noted earlier, one of the key issues is continued reminders to grantees with delinquent reports. In the past, UOP staff rarely had opportunity to make site visits to observe grantee program implementation and communicate directly with grantees about program objectives, best practices, problems, etc. This was particularly true when travel was restricted due to statewide budget issues. Many grant managers believe such visits are necessary to maximize program effectiveness.

We understand that in recent months, lack of opportunity to make site visits has changed significantly. Grant managers are now being required by management to make at least two site visits per quarter to provide technical assistance to, and evaluate the progress of, grantees. They are also responsible for coordinating with local jurisdictions on bi-monthly "Information Exchange" meetings. Management also expects UOP staff to select six of their low-performing block grant grantees and four competitive grant grantees in staff's specialty areas (such as agriculture or community-based social marketing (CBSM)) for the provision of targeted technical assistance.

One option for the future might be to shift more of the administrative burden (such as auditing expenditures) to the Grants Administration Unit, but, as mentioned before, the latter's role to date has been poorly defined by the Board and there appears to be little interest in assigning GAU additional responsibilities. Some UOP grant managers also felt that assigning grant oversight to the various managers based on geographical region, as was the practice in early 2003, did not create an equitable distribution of the workload, since some grants are easier to manage than others and larger jurisdictions, particularly counties, are more difficult to handle. To address this problem and even the workload, supervisors recently redistributed grants to grant managers based on their assessed workload value.

Unfortunately, the grant managers' workload has been made more difficult by the budget crisis that emerged in California during 2003, requiring all State agencies to cut expenditures and staff. The following table indicates how UOP staffing has decreased from 25 to 16 staff between midyear 2002, and January 1, 2004 (with the possibility of more cuts to come). This is a 36 percent reduction in staffing.

Table 10: Used Oil and Hazardous Waste Branch Personnel as of January 1, 2004

(numbers in parentheses indicate personnel as of July 1, 2002)

	Branch Manager	Supervisors/ Senior Technical Staff	Grants and Certification Section I	Grants and Certification Section II	Used Oil Recycling Analysis Section
Professional Staff	0* (1)	3** (5)	5*** (7)	4**** (7)	3**** (5)
Students			2 (3)	2 (3)	2 (4)

^{*} Branch manager reassigned to address implementation of Electronic Waste Recycling Act (Chapter 526, Statutes of 2003, Sher, SB 20).

Source: CIWMB Used Oil Branch, 2004

The supervisors concurrently developed a revised set of duties for the remaining UOP staff, reflecting the most recent budget reduction while retaining the responsibilities for technical assistance and program analysis. Under this plan, the functions of used oil collection center certification and grants administration/management together appear to have the highest priority at 40 percent, while the following functions (at a combined total of 60 percent) have second priority:

- Technical assistance to grantees.
- Certified center assistance and site visits.
- Program analysis of UOP: comprehensive program outreach plan, grant program evaluation, development of tools to assist grantees, and regulation development).
- Attention to emerging waste stream (goes beyond used oil to electronic waste and universal waste).
- Outreach and information sharing.

It appears from the list that the supervisors were trying hard to protect the unit's ability to provide technical assistance and analysis, which had been downplayed with the added burden of administrative requirements.

At times when cuts must be made, however, we believe that the lack of an approved UOP strategic plan is especially unfortunate, for such a plan (if well conceived) would explicitly identify priorities and help to define criteria for determining what must be maintained and what can be cut back or eliminated. As mentioned in the concluding section, depending on the UOP's ultimate goals and objectives, we are not convinced that protecting the unit's grants-management capability is necessarily more important than protecting its ability to provide technical assistance or to maintain a statewide outreach program (or even to analyze grant program information in filing cabinets).

^{**} One staff reassigned to address implementation of Electronic Waste Recycling Act. Another reassigned as supervisor in waste tire unit.

^{***} One staff position is only .8 personnel year.

^{****} One staff is on loan from another unit.

^{*****} Two staff positions are .5 personnel year.

We reiterate our recommendation that a strategic plan for the UOP be developed and adopted, and further recommend that it be used to define criteria for deciding on program reductions (or additions) and changes in duty statements, as necessary.

Engagement of Stakeholders From the Commercial Sector

Other than tracking their claims payments, there is no communication or relationship between the UOP and non-corporate CCCs. The latter typically interact with a grantee or a certified unified program agency (CUPA) instead.

However, the situation is different with regard to corporate entities. UOP staff report working closely with corporations such as Kragen and Autozone on a number of issues such as outreach matters or, more recently, dealing with used oil illegally disposed of at the retail stores after hours. However, from talking with corporate officials, we gained the impression that some corporations would welcome the opportunity to become more actively involved with the program. We recommend that the UOP take advantage of this interest and explore developing new used oil management initiatives and outreach partnerships with the current environmental coordinators at corporations such as Kragen and Autozone.

Need for Continuity

Numerous and frequent changes in personnel in both the public and private sectors, while potentially bringing the advantage of infusing new energy, also diminish institutional memory within the used oil program and other organizations involved with used oil management. This contributes to a lack of continuity and effectiveness in policies and programs, and leads to situations in which opportunities to build on earlier progress are lost and seemingly new initiatives become exercises in "reinventing the wheel." This issue was identified in the Office of Organizational Effectiveness study and by several interviewees.

To reduce adverse impacts from staff changeover both within and outside the used oil program, we recommend that the UOP formally orient new program staff to existing and past programs, new initiatives, and the status of relationships with other agencies and organizations.

Concluding Comments and Summary of Recommendations

We conclude that, after being in existence for a little more than 10 years, UOP has been successful in meeting the instrumental objectives specified in the CORE Act. It has:

- Implemented a recycling incentive.
- Set in place a network of certified and non-certified collection centers throughout the state that currently collect millions of gallons of used oil each year.
- Established a statewide used oil recycling outreach and education program.
- Channeled substantial funding to local jurisdictions, nonprofits, and others through several block and competitive grant programs.

By establishing a used oil collection infrastructure and collecting over 600 million gallons (estimated) of used lubricating oil since 1993, the UOP has also made good progress toward the program objective of reducing the illegal disposal of used oil and recycling and reclaiming used oil to the greatest extent possible.

Although the total amount of used oil recycled prior to the UOP's introduction is unknown (because it was not measured), since 1993—when oil-recycling measurement began—the volume

of oil collected annually appears to have been growing steadily. Even though the DIY sector as a proportion of the population (although not as an absolute number) appears to have decreased significantly during the program's existence, the amount of used oil returned by DIYers for recycling appears to have remained steady (if not increased). This is significant because of the assumption that DIYers are the people most likely to dispose of used oil illegally. So-called "shade tree mechanics" (individuals, typically unlicensed and unregulated, who change oil for family and friends), small rural growers, and independent truckers in rural areas are aggregated with other DIYers in this context.

What is less sure is the extent to which the UOP has achieved the program's ultimate legislative goals, one of which is the conservation of natural resources. While the increase in recycling undoubtedly signifies that we are conserving more than before, at the present time most of the recovered oil is ultimately reprocessed for bunker fuel rather than re-refined oil, even though re-refining is generally acknowledged to be more conserving and less of a risk to public health and the environment.

Most difficult to assess is the degree to which the program has succeeded in avoiding damage to the environment and threats to public health by reducing illegal disposal. The reality, it seems, is that nobody knows for certain how much, if any, environmental or health damage was caused by illegal oil disposal before the UOP was established nor how much damage it has created since. Given the nature of used oil and the quantities unaccounted for, there is certainly reason to suppose that it poses serious risks, but our knowledge base in this area is very incomplete.

Interestingly, although it is difficult to make precise comparisons (because of differences in the way categories are defined, the manner in which data are collected, etc.), it seems that the quantities of oil collected annually from DIYers in four states (Florida, Maryland, Utah, and California) are of the same order of magnitude. All four states have well-established used oil programs; two collect (and spend) revenues based on fees levied on oil sales; but California stands out in regard to the amount of money dedicated to used oil management. A critical distinction, however, is that California regulates used oil as a hazardous waste, which makes it more difficult to persuade businesses to accept used oil from the public.

Within the UOP itself, staff appears to have worked hard to implement the provisions of the CORE Act. Several grantees, for example, went out of their way to praise the staff's helpfulness in assisting with grant applications, reporting, etc. In the absence of a strategic plan for the program (in which objectives, assumptions, etc., might have been laid out more explicitly), the staff has focused on achieving the instrumental objectives, most notably the objective of channeling funds to local jurisdictions. More than one interviewee, among former and present staff, referred to the importance placed on "getting the money out." This implies acceptance of the assumption that the localities are best placed to design and implement their own used oil diversion and recycling efforts.

One—possibly inevitable—result of the focus on instrumental objectives is that the UOP appears to have become more bureaucratic in its functioning. Several interviewees, including at least one who had left the program for this reason, commented that the work has become "less fun." As the workload has increased (and budgetary pressures have pushed it almost to breaking point), staff members have had little or no time to do anything but attend to the grind of grant-related paperwork. For the most part, they have even lost the opportunity to interact on a face-to-face basis with their constituencies, such as by making field visits to grantees. The level of interaction with commercial stakeholders also seems to have fallen. All of this has contributed to a sense, expressed by some, that the program has lost sight of its ultimate goals.

Overall, the UOP does not appear to rank as one of the Board's higher priorities. We were told that various members of the Board have stepped forward, at different times, to champion the program's interests, but that this (welcome) support has not been consistent or continuous. Some staff members commented that, though the UOP manages hundreds more grants than any other CIWMB division, it gets little or no recognition for doing so.

The recycling incentive, a major feature of the program, gets mixed reviews. On the one hand, it is generally acknowledged (and the SFSU study has tended to confirm) that the level of the incentive is too low for it to motivate most members of the public, including DIYers, to change their behavior from illegally dumping to recycling used oil. Apparently, most do not even bother to ask for the 16 cents per gallon incentive payment, although they are entitled to do so. Instead, a substantial amount of total claims money appears to end up in the hands of fast-lube operators who collect very little DIYer oil.

On the other hand, expenditures for recycling claims constitute a small percentage of the total Used Oil Fund revenue collected from oil manufacturers. Most of this revenue has been spent (as intended) on used oil grants, statewide outreach and education, etc., but this does not prevent it from being eyed by other divisions in CIWMB or some units of Cal/EPA, a few of which have sought—sometimes successfully—to divert funds for other purposes.

Given all of the above, the question is, "Where to go from here?" Even without definitive evidence of damage to public health and the environment, it is clear that recycling oil conserves this important natural resource and improperly disposed used oil is an issue that needs to be addressed. As previously mentioned, other states have recognized this (as has the federal government), and many have implemented their own used oil programs.

Our broadest recommendation is that the UOP refocus on the ultimate legislative goals that the California Legislature had in mind when it passed the CORE Act, and systematically consider how these goals might most effectively be achieved. A vehicle for doing this would be a well-conceived strategic planning effort. Hopefully, the findings and recommendations contained in the present report would feed directly into such a planning effort, which would consider options such as:

- Continuing to broaden the oil recycling focus beyond DIYers, to give greater attention to generators of used oil in the agriculture, marine operations, and other potential sectors.
- Focusing less on "getting the money out" to localities and paying more attention to the quality of the programs funded, becoming more aggressive in promoting program improvements to grantees. (This is not meant in a bureaucratic sense, such as preapproving more expenditures, but rather in terms of sharing information and materials, best practices, etc.).
- Becoming more systematic about, and devoting more resources to, statewide outreach and education.
- Increasing the attention given to reducing the rate of generation of used oil in addition to promoting its recycling.
- Considering modifying, or even eliminating, the recycling incentive (paying particular attention to whether it is desirable to continue paying the incentive to fast-lubes and auto repair stores, while ensuring that auto parts stores have an adequate incentive—financial or otherwise—to remain in the network of certified collection centers).

These are just a few of the thoughts to emerge from our study. The following table contains a complete set of recommendations and indicates whether their adoption would be likely to require statutory changes, changes in Board policy, and/or significant shifts in staff workload. For better clarity and flow, the precise wording (but not the content) of the recommendations has been revised from what is in the body of this report , as well as the order in which the recommendations are presented.

Table 11: Recommendations Based On Study

Number and Report Category	Recommendation	Would Require Statute Change	Would Require Board Policy Change	Would Require Shifts in Staff Workload
1. Strategic Planning	Prepare a strategic plan for the UOP. Early in the process, involve staff in defining and/or clarifying both broad and specific goals and objectives for the program and its constituent parts.			X
2. Grants Administration	Consider establishing diversion goals for block grant grantees and/or measuring performance against State averages in order to identify poor performing jurisdictions that should be targeted for technical assistance.			X
3. Grants Administration	Further analyze GAU and UOP administrative procedures to determine the critical tasks. Identify the roles and functions of each unit and further streamline the grant process.			Х
5. Grants Administration	Consider completely overhauling the cyclical process currently used for block grants, replacing it with a process in which the Board automatically allocates each locality's annual block grant entitlement (without requiring a new application), as long as they have met applicable reporting and other accountability requirements for the previous grant cycle.		X	X

Number and Report Category	Recommendation	Would Require Statute Change	Would Require Board Policy Change	Would Require Shifts in Staff Workload
6. Grants Administration	If grantees continue to raise it as an issue, pay careful attention to the timing of key stages in the application process, including the offering of workshops, seeking and taking into account the opinions of would-be applicants in this regard (through informal de-briefings and other means).			X
7. Grants Administration	Emulate the Department of Conservation in allowing authorizing resolutions to be used as long as the information on them remains valid.		X	X
8. Grants Administration	Make greater efforts (such as through the <i>Grants Bulletin</i> and the annual conference) to ensure that all jurisdictions are fully aware of the options they can pursue in lieu of individual resolutions for each grant application.			X
9. Grants Administration	If further research substantiates interviewees' concerns about the distribution of grants, consider restructuring the opportunity grant program so that only small/medium-sized and/or rural jurisdictions (for example, cities and counties below 100,000 in population) might apply.		X	X
10. Grants Administration	Utilize research and analysis regarding oil recycling/disposal issues and the most promising activities to develop priority program criteria in the selection process for competitive grants			X

Number and Report Category	Recommendation	Would Require Statute Change	Would Require Board Policy Change	Would Require Shifts in Staff Workload
11. Grants Administration	Take a more flexible approach in defining and negotiating administrative and other overhead costs with both grantees and contractors, especially when dealing with smaller organizations (including localities which pool their resources in regional programs) and with entities whose overhead rates are based on audited data. Consider addressing overhead rates in terms of cost effectiveness or budget during the review of competitive grants.		X	X
12. Grants Administration	Continue current initiatives aimed at evaluating and providing feedback to grantees on their effectiveness at accomplishing the program's goals, with adequate support from the Board.			X
13. Grants Administration	Continue to look out for opportunities to further reduce the paperwork faced by grantees and grant managers, taking into account feedback from the grantees themselves.			X
14. Grants Administration	Adopt a 90-day grace period for block grant reporting, similar to the time allowed for the return of grant agreements and strictly enforce this reporting requirement. Grantees that do not turn in satisfactory reports within that time period should lose eligibility for the subsequent block grant based on poor performance.		X	
15. Grants Administration	Regularly review what kinds of analysis are most likely to help in further improving the program, now and in the foreseeable future, and adjust the reporting requirements accordingly.			X

Number and Report Category	Recommendation	Would Require Statute Change	Would Require Board Policy Change	Would Require Shifts in Staff Workload
16. Grants Administration	Increase the accessibility of grant project results as well as other relevant information generated by contractors and grantees—for example, on the program's website and in more frequent issues of the <i>Used Oil and HHW Grants Bulletin</i> .			X
17. Grants Administration	Assuming that CIWMB's grants database continues to perform up to expectations, provide adequate resources to allow the UOP (and other CWIMB grant programs) to enter grant performance data and to fully exploit the tool's qualitative and quantitative analytical capabilities.			X
18. Grants Administration	Expand the online vendor list of the recycled content of products that grantees are most likely to use and increase advertising of that list.			X
19. Grants Administration	Encourage the Buy Recycled unit to provide information on the website that could benefit the grantees as well as the public. As long as the recycled-content product requirement is in place, and provided the grantees make a good faith effort to fill them out, encourage the Buy Recycled staff to show reasonable flexibility in reviewing the recycled-content forms, consolidating the data, and allowing for the fact that information about some products might be difficult to obtain.			X
20. Grants Administration	Since the auditing system is believed to provide an adequate safeguard against abuse, confine grantee documentation of expenditures for competitive grants to an itemized list of expenditures rather than copies of all receipts.		Х	X

Number and Report Category	Recommendation	Would Require Statute Change	Would Require Board Policy Change	Would Require Shifts in Staff Workload
21. Grants Administration	Consider allowing grantees, particularly nonprofit organizations, to seek waivers from the 10 percent withholding rule (possibly only for grants up to a specified size) upon demonstration of adequate fiscal responsibility.		X	X
22. Grants Administration	Consider requesting a waiver of the interest tracking requirement for advance payments that are relatively small (for example, below a designated threshold, to be agreed upon with the Department of Finance).		X	X
23. Grants Administration	When interest tracking is still required, allow grantees to subtract the interest from their claim for reimbursement of the 10 percent of grant money withheld until the end of the grant period.		X	X
24. Grants Administration	Explore the possibility of shifting to a system for grant applications and grant/contract reporting that is mostly or entirely on-line.			X
25. Grants Administration	Take a more proactive role in helping grantees identified as poorer performers (based on such data as used oil collections versus sales of oil) to do better in the future.			X
26. Grants Administration	Consider adjusting the point system used in the selection process for competitive grants, when adequate information is available, to take into account past performance.		X	X

Number and Report Category	Recommendation	Would Require Statute Change	Would Require Board Policy Change	Would Require Shifts in Staff Workload
27. Source Reduction	Raise the priority given to exploring and advocating source reduction alternatives, such as extending intervals between oil changes. Consider conducting additional research, in conjunction with funding from other related State agencies such as the Air Resources Board, the California Department of Transportation, and the California Energy Commission, on promoting the benefits of driving fewer miles.		X	
28. Recycling Incentive System	Conduct further research to determine whether the recycling incentive is needed to ensure proper used oil/filter disposal practices. Depending on the results of this research, seriously consider changing the present recycling incentive system.	X		X
29. Certified Collection Centers	Focus CCC recruitment efforts on pockets of population not currently served by a certified center within a three-mile radius.			Х
30. Certified Collection Centers	Continue to search for possible changes that would further simplify administrative processes.			X
31. Certified Collection Centers	Consider: (1) if the \$5,000 amount per claim did not cover the cost of past oil contamination incidents, increasing the maximum dollar amount for contaminated recycled oil reimbursement, and possibly allowing CCCs more than one claim per year, provided that the dollar cap is not exceeded; (2) in addition, or as an option, allowing localities at their discretion to allocate block grant funds to CCCs to pay for the removal of contaminated oil; and/or (3) addressing the contaminated oil	X	X	X

Number and Report Category	Recommendation	Would Require Board Policy Change	Would Require Shifts in Staff Workload	
	problem by means of a private insurance scheme, with localities' or individual collection centers' premiums subsidized partially or entirely by the State. Note that grantees may currently "pay for a rider on their insurance to cover the possibility of contaminated loads at noncertified centers. The centers must, however, also take steps to prevent contaminated loads by using signs, fencing, education, etc." (Used Oil & HHW Branch, Manual of Policies and Procedures, Section 3-23, May 1998)			
32. Certified Collection Centers	Step up efforts to emphasize to all collection centers (both certified and non-certified) the advantages of using best management practices (BMP), which some centers have already adopted. Also inform all CCCs of the extremely low contamination incidence rate.			X
33. Certified Collection Centers	Consider partnering with the federal government and other states to develop a low-cost PCB detection kit.			Х

Number and Report Category	Recommendation	Would Require Statute Change	Would Require Board Policy Change	Would Require Shifts in Staff Workload
34. Certified Collection Centers	Consider (1) providing collection centers with more of an incentive to accept used oil filters—for example, through a filter exchange program in which a free filter is provided for every one or two used filters disposed of, and (2) encouraging grantees to use block and competitive grant funds to purchase filter crushers for CCCs, as appropriate, and/or to pay for hauling used oil filters to recyclers. The Board might consider going as far as requiring CCCs to accept filters but, if it did so, the CCCs should be given the ability to request a waiver from this requirement if physical constraints made it impossible to meet.	X	X	X
35. Reuse Of Used Oil	Continue and possibly increase the promotion of re-refining over other means of reusing used oil. Partner with industry in exploring the options for expanding re-refining capacity in California, beyond the expansion for which permits are currently being sought.		X	
36. Reuse Of Used Oil	Explore whether it is desirable and/or possible to improve the marketability of re-refined oil as a feedstock for blending into undifferentiated products. Companies willing to document their use of re-refined oil in this manner could be recognized (for example) in an "environmentally friendly" award program, and they might reap benefits in the stock market from environmentally motivated investors.		X	

Number and Report Category	Recommendation	Would Require Statute Change	Would Require Board Policy Change	Would Require Shifts in Staff Workload
37. Reuse Of Used Oil	Consider the possible advantages/disadvantages of terminating existing procurement requirements for explicitly labeled re-refined oil, since there may be better ways of promoting re-refinement. However, as long as these requirements remain in place, at federal and/or State levels, a portion of re-refined product is likely to be explicitly labeled and marketed as such. Under these circumstances, continue efforts to promote the use <i>in bulk</i> of this product by fast-lube stores and fleet managers (in both public and private sectors).	X		X
38. Reuse Of Used Oil	Because of the difficulty of overcoming the stigma attached to re-refined oil in some people's eyes, and because we believe it is not essential to ensuring an adequate market for the product, discontinue efforts to promote the sale of explicitly labeled re-refined oil directly to retail customers.			X
39. Outreach and Education	As part of the proposed strategic planning activity for the overall UOP, prepare a plan with explicit outreach goals and objectives.			Х
40. Outreach and Education	Continue efforts to educate automotive DIYers and others in agriculture, marine operations, etc., who currently lack knowledge about proper used oil management and the risks of improper used oil disposal, targeting especially immigrants and young adults.			X
41. Outreach and Education	Reconsider the continuation of efforts to promote the use of rerefined oil by retail customers (as opposed to bulk users such as government agencies and other fleet operators).			X

Number and Report Category	Recommendation	Would Require Statute Change	Would Require Board Policy Change	Would Require Shifts in Staff Workload
42. Outreach and Education	Give a high priority in future outreach efforts to the promotion of source reduction (for example., extending intervals between oil changes through the use of improved oil products, improved filtration options, and/or oil testing).	s the		X
43. Outreach and Education	Develop an outreach infrastructure that more easily enables sharing of information, tools, and resources among grantees.			X
44. Outreach and Education	Seek modification of the existing grants data base on the CIWMB public website so that it becomes a centralized source of information about programs and their effectiveness. Also develop other means for grantees to learn from one another's outreach efforts and to access statewide information (as in the tobacco program).			X
45. Outreach and Education	Develop a more cohesive and compelling statewide recycling message.		Х	Х
46. Outreach and Education	Establish public-private partnerships to extend the recycling message.			Х
47. Outreach and Education	Investigate opportunities to target industrial sectors with the used oil message.			Х
48. Outreach and Education	If the pilot projects currently underway provide evidence in support of the effectiveness of community- based social marketing, encourage its wider implementation by grantees. Since most grantees currently lack expertise in social marketing techniques, adequate training and support (such as literature, workshops, and possibly access to a qualified consultant) would also have to be provided.			X

Number and Report Category	Recommendation	Would Require Statute Change	Would Require Board Policy Change	Would Require Shifts in Staff Workload	
49. Outreach and Education	Improve the educational component by making existing materials easier for teachers to incorporate with mainstream curricula.			X	
50. Website	If linkage problems with the UOP and other CIWMB websites still exist, install additional links, as appropriate.	P and other CIWMB sites still exist, install			
51. Organization and Operations: Used Oil Branch	In view of workload and other constraints, continue to be selective in pursuing and analyzing appropriate data in a manner most likely to lead to program improvement.			X	
52. Organization and Operations: Used Oil Branch	Compare the oil collection volume and CCC service to DIYers at CCCs in Southern California before and one year after the departure of the dedicated collection center inspector in that location to determine if there is a correlation between dedicated inspection and CCC performance. If there is a positive correlation that is not readily explained in another way, reassign a dedicated CCC inspector to Southern California and create a staff position to cover Central and Northern California.		X	X	

Number and Report Category	Recommendation	Would Require Statute Change	Would Require Board Policy Change	Would Require Shifts in Staff Workload
53. Organization And Operations: Used Oil Branch	Systematically evaluate the Desk Manual for Grant Managers, taking into account the views of its users, and use the results of the evaluation to guide improvements. Consider including a summary of responses to the key issues that a manager is likely to encounter, especially when first serving in this role. Give greater prominence to grantee activities that are permissible—and particularly "best practices" that are to be encouraged—than to grant expenditures that are prohibited.			X
54. Organization And Operations: Used Oil Branch	Now that GMS has been in operation for some time, arrange for an evaluation by its users. Consider the possibility of hiring a contractor to both evaluate and prepare a new manual, if the need is confirmed.			X
55. Organization And Operations: Used Oil Branch	Systematically document and categorize by topic on the website all issues submitted to, and resolutions reached by, the Grants Oversight Executive Committee so that Board staff have access to the outcomes for use as a management tool.			X
56. Organization And Operations: Used Oil Branch	Once developed, use the UOP's strategic plan to define criteria for deciding on program reductions (or additions) and changes in staff workloads, as necessary.		Х	X
57. Organization And Operations: Used Oil Branch	Further explore the feasibility and desirability of joint fee collection by CIWMB and the Department of Food and Agriculture.		Х	Х

Number and Report Category	Recommendation	Would Require Statute Change	Would Require Board Policy Change	Would Require Shifts in Staff Workload
58. Organization And Operations: Used Oil Branch	To reduce adverse impacts from staff changeover both within and outside the used oil program, formally orient new program staff to existing and past programs, new initiatives, and the status of relationships with other agencies and organizations.		X	
59. Measuring programmatic success	Increase the attention given to qualitative information (such as stormwater pollution prevention research and water pollution monitoring results) regarding the extent of, and damage caused by, illegal used oil disposal.		X	
60. Measuring programmatic success	Expand regular published reports to include as wide a range of quantitative and qualitative information as possible (particularly outcomes-related, such as quantities of virgin oil conserved as the result of using re-refined oil), in order to give a more complete picture of the program's achievements.			X
61. Protection of public health and the environment	Conduct more research on damage to human health and the environment caused by illegal disposal of used oil by DIYers and others.		Х	Х
62. Protection of public health and the environment	Give continued attention to the relationship between used oil leakage, stormwater runoff, and pollution.			Х
63. Engagement of Corporate Interests	Take advantage of corporate interest in the program and explore developing new used oil management initiatives and outreach partnerships with the current environmental coordinators at corporations such as Kragen and Autozone.			X

Appendix A: Summaries of Selected Studies

Residential Used Oil Filter Pilot Program

The pilot program began in early 1995 and concluded June 30, 1997. It began with the observation that approximately 90 percent of the 19 million oil filters sold annually in California are discarded along with the used oil they contain, leading to the loss of 7,000 tons of steel and over 1 million gallons of used oil on an annual basis. This poses a significant threat to the environment, which led the Board to conduct a two-year used oil filter pilot program. The goal of the pilot program was to assess the barriers to collection of used oil filters from the public and to determine how best to address the statewide need for collection.

Findings from the study were:

- There are few convenient opportunities for the public to recycle filters.
- There is a lack of public knowledge of the environmental impacts of illegal disposal and the recyclability of filters.
- The principal barrier to establishing and maintaining collection opportunities is the cost of hauling.
- Local governments lack the resources necessary to meet this challenge, and businesses and industry are reluctant to support collection because of the significant cost.
- The public is very reluctant to pay a disposal fee to a business for accepting used oil filters.

The study found that with cost assistance, businesses would accept used oil filters from the public and local jurisdictions were willing to incorporate filter collection into their programs.

Overall, the pilot program was considered a success and resulted in the subsequent allocation of \$841,000 of used oil funds annually to local jurisdictions for the purposes of used oil filter collection.

San Francisco State University DIY Oil Study

Starting in April 2000, the Public Research Institute (PRI) at San Francisco State University conducted focus groups, developed and piloted an improved survey instrument and methodology, and conducted a statewide survey in order to update prior research, including a previous statewide survey conducted for the CIWMB in 1994. The overall study was intended to assist the Board in defining and understanding the target audiences for its outreach efforts and in designing more effective outreach tools and messages to support behavioral change.

The study was also intended to address methodological issues, including problems of *response bias* (the tendency of respondents to over- or under-report behavior based on its perceived social desirability) and *non-response bias* (non-participation in surveys among groups that are difficult to reach and who are often more reluctant to be interviewed). Hispanics were of special concern because the 1994 survey had concluded that they contributed disproportionately to improper used oil disposal. In order to improve the ability of the project to reach Hispanic populations, PRI organized a forum of researchers experienced in working with Latinos.

Initial results of the study were presented in a report dated January 2002—Outreach Research—Survey and Focus Groups: DIYers and Used Oil Disposal, Initial Results and Recommendations (San Francisco State University, 2002). In seeking to define the DIY population, the study found that 19 percent of households change their own oil and 2.3 million DIYers live in California. This number had remained about the same since 1994, but the rate of DIY had declined due to population growth. Eighty-seven percent of DIYers in California are men and are more likely to

change their own oil if they are under the age of 65. The report states, "Rates of DIY and rates of improper disposal are greater in rural areas, but the numbers are in the cities." (San Francisco State University, 2002, p. 51)

Measures of the percentage of DIYers who illegally dispose of used oil ranged from 8 to 36 percent, with 19 percent suggested by counting respondents who reported improper disposal directly or who were unable to name or locate a collection center to which they said they took their oil. These numbers suggest a declining trend in illegal disposal from 1994 to 2001, but the study cautions that "the apparent change may reflect a decline in willingness to report improper disposal as well as a reduction in actual improper disposal." (San Francisco State University, 2002, p. 23)

The study found that race and ethnicity are not a significant factor in the illegal disposal of used oil. In particular, "...the 2001 survey does not support the conclusion that Hispanics or any other group dispose improperly at higher rates than other groups." (San Francisco State University 2002, p. 26) Those more likely to dispose of used oil improperly, according to the study, include California residents who have lived in the United States for less than five years and DIYers who live more than three miles from a collection center.

Awareness of specific impacts of used oil on the environment did not appear to be a significant factor in distinguishing between proper and improper disposers. Additionally, no substantial difference in media use or leisure activities was found between improper and proper disposers.

Along with proposing further research, the report concluded that DIYers can be targeted as a broad audience in outreach efforts to men between the ages of 16 and 40. The most DIYers might be reached using morning or afternoon radio advertisements and outreach directed to sports events, auto races, and auto shows. Alternative approaches to outreach, such as the use of street signs, might be more cost-effective than traditional mass media advertising. The study recommended that newcomers to California should be specially targeted by outreach. It also suggested that curbside collection programs, which appear to achieve a very high level of recycling, should be given renewed consideration, even though localities have not implemented new programs of this kind in recent years. Finally, the study suggested using local surveys to get more local and regional information about DIYers and about the effects of local programs.

Since SFSU's initial report was published by the Board in January 2002, the contractor has continued to refine and extend the analysis. We understand that some of the earlier findings will be revised in a new report, due to be finalized later in 2004.

Office of Organizational Effectiveness Study

The California Integrated Waste Management Board's Office of Organizational Effectiveness (OOE), issued an assessment of the CIWMB grant programs in its July 19, 2002 publication, *Administration of Grant Programs Assessment Report*. The objective was to assess interactions among three program divisions (one of which was the Special Waste Division, which incorporates the Used Oil Program), the Administration and Finance Division (which incorporates the Grants Administration Unit), and the Legal Office as they work together to maximize the impact of CIWMB grants on California.

The methodology of the study was to ask people closely involved in grant administration to describe the following:

- Work they do in administering CIWMB grant programs.
- What supports them and what makes it difficult for them to do this work.
- Skills, knowledge, and abilities they need to do this work.

How they measure success.

The analysis was designed to address the following questions:

- What are measures of success for people most closely involved in the administration of the Board's grant program?
- What do the employees need to do to meet operational objectives?
- What new skills and knowledge do employees administering the program need to possess to perform successfully?
- What needs to be developed and or improved in the environment of employees administering the grant programs?

The report's findings focus on what contributes to success, and what represent the key barriers, in maximizing the impact of CIWMB grants on California. OOE found that success is due largely to the institutional and grants program knowledge (content and process) held by many of those involved in grant administration in the three entities studied. It was concluded that access to those holding this knowledge supports successful administration.

Key barriers identified in the study include the following:

- Limited or no access to institutional and grants knowledge.
- Policies, processes, and procedures—unclear, missing, inconsistent, inaccurate, and/or difficult to interpret and communicate.
- Unclear roles and responsibilities.

The report points out, for example, that knowledge is held by long-timers, and that the knowledge base is diminishing due to attrition. Others may not know who these people are and what knowledge they hold. The grants databases used at the time of the study (such as GRATI\$) contained outdated and inaccurate information, causing the divisions and Grants Administration Unit to create supplementary systems.

The interpretation of Board policy can be a challenge, in part because of inconsistencies between direction resulting from formal Board action and that communicated by Board members informally. Attempts to standardize across all grant programs can also be problematic, according to the report, because different grant programs have different customers and program objectives. The lack of written procedures causes constant confusion over process. And the division of responsibilities between the program divisions and the Administration and Finance Division (AFD) are not clearly understood, in part because AFD's precise responsibilities were never specifically defined by the Board.

Appendix B: Description of Stakeholder Perspectives

This appendix contains a descriptive presentation of the information provided to us by stakeholders, specifically (1) Board members and staff (present and former); (2) recipients of block grants; (3) operators of certified collection centers and agricultural collection centers. In each case, the methodology employed to obtain the information is indicated. It is important to note that, while an effort was made to seek input that might be considered reasonably representative, the scope of the project did not allow for statistically significant results to be obtained through the systematic surveying of respondents. In other words, much of the input was anecdotal and, as such, was considered suggestive rather than definitive.

Board Members and Staff (Present and Former)

Methodology

The project officer supplied the names of Board members, of present and former UOP staff members, and of certain additional CIWMB staff members (for example, in the Grants Administration Unit) for the project team to interview. The three Board members who all serve on the committee that oversees the UOP were interviewed face-to-face or by phone. In most cases, the present and former staff were initially contacted by e-mail, with one or more face-to-face and/or telephone interviews held subsequently.

Findings

Program Initiation

Interviews with former staff persons in the UOP indicate that the program was started quickly and that the staff did not have much time to develop the necessary rules and regulations to carry out the intent of the legislation.

A particular concern was that the extent of the problem of improper used oil disposal (prior to the UOP's introduction) was never determined, making it difficult subsequently to track changes over time.

Planning

When UOP staff were asked about the three successive versions of the CIWMB Strategic Plan and whether the plan had been a significant factor affecting the direction of the used oil program, many felt that the UOP was not reflected in the plan. Despite this fact, certain aspects of the plan are still widely used by the staff. In particular, current staff felt that the goals of increasing public awareness and public participation affect the UOP. Other significant goals include product stewardship and environmental justice.

Although some staff had not read the plan, nor had they known of its development before it was published, the Board nevertheless expects the UOP's actions always to be consistent with the plan. This is manifested, for example, in the language of contract proposals submitted by the program to the Board.

Goals and Objectives

According to interviewees, beyond assuring safe collection of used oil and some limited support of projects to promote re-refined oil through grants and contracts, the UOP is not actively involved in used oil reuse. The focus of the UOP, at least in recent years, has been to prevent

inappropriate disposal of used oil through effective diversion and collection rather than on identifying and supporting the most beneficial methods of reuse.

Staff interviewees felt that used oil optimally should be re-refined rather than burned as a fuel. However, it is problematic for the UOP to dictate the re-use of used oil, they argued, because the program, being part of a regulatory agency, has little ability to effect a change in the market. Furthermore, they sense that there is a strong sentiment on the part of oil manufacturers against pushing too hard on the promotion of re-refined motor oil.

Instead, we were told, the UOP supports outreach efforts in this area, to educate people about the benefits of using re-refined oil, including direct and intense outreach to fleet managers. A pilot program in working with fast-lube businesses has recently been initiated with the aim of increasing the use of re-refined oil. However, one staff interviewee was doubtful that any outreach would be sufficient to get consumers to buy oil labeled as re-refined. Instead, he suggested that used oil might be blended with the feedstock for regular oil refining, to avoid attaching the stigma of "re-refined" to the product.

Organization

Most of the current staff who were asked about the UOP organizational structure gave favorable responses, although questions were raised about the fundamental purpose of the grants programs that could impact the organization of the unit. If the fundamental purpose is to administer and process grants, it was suggested, then all of these programs should be in one division to make them more cost-effective. However, if the purpose of the grants programs is to provide assistance and interaction with the local jurisdictions in the implementation of local programs, then the grants programs should be organized (as they are now) by material, such as used oil.

Current staff also drew attention to the Grant Oversight Committee. This committee can decide issues at the Deputy Director level rather than at Board meetings, leading to a lower administrative burden on staff.

It was suggested that the UOP's effectiveness had been increased by establishing a policy analysis unit, separate from the grants management units, and with the appointment of a policy analysis manager. Unfortunately, the role of the policy analysis unit has become more difficult as staff time has been lost to the scoring of applications, grants management, etc.

Also mentioned as a concern was the issue of staff workload which, it was contended, is not equitably distributed. Nevertheless, it was suggested that supervisors do make constant efforts to make the workload more equitable.

Targets: DIYers

Interviews with current staff suggest that, while the DIY population has historically been the focus of the UOP, it is not necessarily the most appropriate target. The assumption is that the DIYers are the most significant source of improperly disposed used oil, but no study has confirmed this assumption. Indeed, a link between DIYers and illegal disposal has not been proved. It was suggested that much of the reported discrepancy between oil generated and oil recycled could be explained by losses through leakage.

Measures of Success

Beyond meeting statutory goals and objectives, several staff said that outreach to grantees, making sure the grantees understand the purpose of the funding, and leading grantees to develop better programs all contribute to a definition of success. Other definitions include the outcome of grants. If grantees spent less time meeting Board administrative requirements, it was suggested

they could spend more time on assessing program successes and failures. In turn, the UOP would be able to share the information across the state to improve other grant programs.

Grant Programs

Accountability is necessary in grant programs, several interviewees contended. However, it was stated that there has been no known loss of control to date, as the application process has been simplified, and arguably the process could be made even more simple and less restrictive.

According to a current staff member, current procedures appear deceptively simple because the actual application is short, but the need to have annual authorization letters from every participant creates a lot of work for some of the larger regions. Also criticized was the itemized expenditure list, which takes a significant time for local jurisdictions to complete and forces grant managers to do more accounting work (and less technical assistance and outreach to local jurisdictions). In general, staff felt that the fear of audits provides an adequate check on expenditures. Overall, in the view of the staff, many of the application and reporting processes could be further simplified.

Cited by several current staff, the State Agency Buy Recycled Campaign is considered a good idea, but the staff argue that it should be secondary to the UOP's goals and objectives. In the staff's opinion, the recycled-content certification form is a burden for grantees to complete, leaving the latter less time to implement the UOP and develop more meaningful assessments (in other words, identifying program successes and failures).

One staff member illustrated the point by mentioning that a grantee had spent half a day calling manufacturers in Bangladesh to ascertain the recycled content of the fabric in some t-shirts the grantee had purchased. As it happens, the grantee's time had been spent very poorly, because textiles are not even a reportable recycled-content program category.

Interviews with current staff also indicated that the application and reporting requirements for competitive grants are more onerous than those for block grants. There were mixed feelings about the more demanding requirements. Some staff members supported them as long as they advance the legislative goals and objectives of the program and they do not deny funding to a potentially good project because of a requirement secondary to the program goals and objectives. Others argued that the complex application and reporting processes deter potential applicants from applying for the grants and make panel scoring difficult.

It was noted that expenditures on opportunity grants have been decreasing over time. Several causes for this were identified through the current staff interviews. A decrease in the demand for opportunity grant funding had been anticipated as participation in the block grant programs increased. Since opportunity grants are used mostly for infrastructure, less demand had been expected once most jurisdictions had progressed in infrastructure development. Still, some staff were concerned about the trend. Some felt that the opportunity grant application process favors larger jurisdictions with good proposal-writing capability, while discouraging smaller jurisdictions from applying.

One interviewee suggested that the opportunity grants should be discontinued both due to the decrease in demand for the grants and because larger jurisdictions seem always to get them. Instead of offering opportunity grants, this interviewee argued, the program should offer funding for infrastructure in the block grants, awarded on a per capita basis. Other interviewees wanted the opportunity grant program to be retained.

A concern was expressed about jurisdictions handling multiple grants. It was suggested that all of the grants might in practice be spent for the same purpose. Instead, consideration might be given to awarding a single block grant to localities, determined on a per capita basis, and then allowing the localities to contract out for research and development and other work by nonprofit entities and others.

Administrative Effectiveness

Interviews with UOP staff added to findings by the Office of Organizational Effectiveness, suggesting that staff members spend too much time processing grants and too little time in the field and/or doing outreach and technical assistance for grantees. Providing assistance in the implementation of local used oil programs and understanding what makes a successful program have become impossible, given the workload of grant managers. As a consequence, according to several interviewees, it is difficult to achieve program goals.

One staff member said that the program expects grants managers to spend 50 percent of their time doing managerial activities and 25 percent providing technical assistance, but the same individual has been in the field only once.

Another concern voiced in the interviews, consistent with the OOE findings, is that much of the knowledge (for example, on policies) affecting the UOP is held as personal knowledge and/or communicated from person to person among the staff rather than being written down. With the fairly significant turnover in staff that has occurred in this program since its inception, important information has been lost.

Staff mentioned that the Grants Management System was implemented before being fully tested; it has obvious shortcomings in that it is not user-friendly and cannot be used without a manual. The existing manual is brief and incomplete and fails to adequately address questions about entering data, running reports, etc. It was recommended that a contractor be hired to prepare a new manual.

Grantees Receiving Block Grants

Methodology

The selection of block grant recipients for surveying was based on a list of 18 grantees provided by UOP staff. Staff recommended this list of grantees for surveying because, in their opinion, they represent both grantees with thoughtful used oil programs and grantees with relatively undeveloped programs.

E-mails requesting survey completion were sent to staff members leading local used oil programs within each of the 18 jurisdictions. A list of survey questions was attached to each e-mail. Respondents had the option of completing the survey electronically or of responding by phone interview. Of the 11 grantees on this list that agreed to complete the survey, 4 opted to participate in phone interviews and the remaining 7 responded electronically. Then, to obtain a survey sample that better represented rural areas, an additional grantee not on the original list of 18 was interviewed by phone, making a total of 12 completed interviews. The findings are stated as the respondent reported them. In some cases, the respondent's understanding does not reflect the existing UOP requirements.

Findings

Setting Goals and Evaluating Program Success

Goals

Many grantees claimed they set goals, but did not define them. One grantee provided a more specific set of goals than the others. Such goals related to number of presentations made, number of events held, expenditures, keeping outreach materials updated, and number of people buying re-refined oil. Another grantee's goal is to provide sufficient outreach, while another aims to make curbside collection available to all those that want it.

Evaluating Program Success

Most grantees stated that they evaluate program success based on maintenance of or increases in used oil/filter collection. Several grantees stated that they measure success according to the amount of outreach accomplished, especially outreach to target groups. Also mentioned was evaluation of success based on convenience of oil recycling for DIYers, ability to meet everyone's collection needs; expenditure of grant funds on eligible activities, increase in certified collection centers submitting claims for the financial incentive for the oil they collect, and increased annual requests for a used oil recycling calendar.

Only a couple of grantees stated that they try to relate surges or decreases in oil/filter collection to program activities or lack thereof.

One grantee measures the success of every activity by conducting spot surveys. These spot surveys are conducted at locations such as the UOP booth at a special event. For example, people visiting the booth might be asked how they heard about the event or the booth. They also might be asked other questions regarding the program, such as questions concerning convenience of curbside collection. People visiting the booth are selected for surveys randomly (for example, every third person). This grantee also evaluates the program's performance quarterly by examining collection statistics in relation to program activities.

Perceived Strengths of California's Used Oil Program

Staff

Grantees identified CIWMB staff as a major strength of California's UOP. They describe the staff as being readily available to provide guidance through workbooks, telephone conversations, and written material explaining any changes in block grant procedures. Staff were further described as active, caring, information-sharing, cooperative, and flexible, allowing each jurisdiction to develop its own used oil program to suit its unique needs.

Consistent Funding

Consistent funding was identified as another strength of the UOP. Being able to rely on grant money from the State each year makes it easy for a jurisdiction to budget its money and to keep its used oil program operating smoothly.

Simple Grant Procedures

The simplicity and clarity of grant application and grant reporting procedures were praised. Grant requirements are apparently easier to fulfill than they used to be. For example, now CIWMB provides a template to complete with short facts and data, rather than requiring a more open-ended report like it did in the past. Also, CIWMB now requires only one annual report, rather than the two semi-annual reports required in past years. One respondent also appreciates the fact that grantees can modify their programs and do not have to adhere exactly to the program plans prepared for the application.

CIWMB Website

One grantee praised the helpfulness of CIWMB's website.

Constant Evolution of the Used Oil Program

One grantee was appreciative of changes in grant cycle procedures and requirements in response to previous experiences.

CIWMB's Decreased Involvement in Development of Promotional Materials

Before approving promotional materials, CIWMB staff now only needs to see the final product, as compared to previous years when they were involved in developing the product. It was reported that this approach is less burdensome, because corresponding with CIWMB throughout promotional material development was time-consuming.

Information on Public Education and Social Marketing Provided by CIWMB

Respondents believe that CIWMB often provides them with helpful information about public information and social marketing through information booklets, case studies, survey results, and workshops. Additional resources on social marketing were requested, however, to aid in developing a more in-depth used oil program.

Concerns expressed by grantees

The following concerns or "obstacles" to the implementation of grantees' used oil programs were mentioned in interviews:

Collection centers not accepting used oil filters

Grantees report that many certified collection centers will not accept filters, even though the centers are told that they will be reimbursed. In some cases, the centers simply do not have space for filter collection.

Collection centers lost due to improper drop-off of used oil

Some certified collection centers experience problems with large quantities of oil left by DIYers after business hours. Sometimes this oil is contaminated, leaving the certified center to pay for its handling. Other times, the quantity of oil left simply overwhelms the center's used oil storage capacity. These inconveniences sometimes cause certified centers to cease certification and drop out of the UOP's certified collection center program.

Collection centers lost due to burden of contaminated oil

Several grantees stated that local certified collection centers are occasionally given contaminated oil. Dealing with the disposal of this oil discourages collection centers from remaining certified, despite the possibility of reimbursement from the State.

A respondent implementing a block grant in an agricultural area cited liability concerns as a major issue for agricultural collection centers. These centers are concerned about the financial burden of paying for the testing and hauling of contaminated oil. The respondent stated that agricultural collection centers are not certified, excluding them from receiving reimbursement (up to \$5,000 annually) for the handling of contaminated oil.

Collection centers lost due to language barriers

One grantee cited the loss of a certified collection center due to the owner's lack of English fluency. The owner found it difficult to understand the administrative requirements of a certified center.

Stockpiling of oil by the public

One respondent reported that people living on remote properties and retirees unable to transport oil to certified collection centers sometimes stockpile oil. This is problematic because it hinders

used oil collection. It can also make eventual transport of the oil to a collection center difficult, as there are limits to the amount of oil that can be transported per trip, and large volumes of oil are also difficult to transport.

One grantee implementing block grants in an agricultural area discussed such transport difficulties faced by growers. Growers generate large quantities of oil and are interested in recycling it. However, some do not have forklifts to lift the drums of collected oil for transport. They would prefer to have a hauling company come to their homes to collect stored oil. The idea of a mobile agricultural collection service was proposed by the grantee agency, but residents resisted this idea. They are suspicious of registering with the State and obtaining a Cal/EPA ID numbers for this service.

Convincing the public to recycle used oil/filters

Respondents noted that it is difficult to convince the public to change their habits and recycle used oil and filters. One grantee believed that more block grant funding is needed to develop an effective social marketing campaign.

Lack of advertising alternatives for recycling of used oil in rural areas

One grantee cited the limited options for promoting used oil recycling in rural areas. These advertising limitations are lack of cable television, large areas with no radio reception, and small local newspapers with little circulation. One-to-one outreach in these areas, then, is most cost-effective (in the opinion of this grantee).

Difficulty promoting re-refined oil use

A couple of respondents identified promotion of the purchase of re-refined oil as important to their programs. They believe that in order to complete the used oil recycling process, people need to use re-refined oil. Obstacles to persuading people to purchase re-refined oil are DIYers committed to a particular brand of oil and CIWMB's discouraging grantees from using grant funds to purchase and distribute re-refined oil at educational presentations. One agricultural grantee attempts to surmount DIYers' distrust of the quality of re-refined oil by persuading drivers at the local raceway to use re-refined oil in their engines. This demonstrates to both the driver and spectators the high quality of re-refined oil.

Assessing improper disposal methods and offenders

It was reported that determining the number of DIYers and the proportion of them improperly disposing of their oil is difficult. Determining where most of the improper disposal takes place, whether it be into storm drains, on the ground, or in the trash, is also difficult.

Expense of curbside recycling

A couple of grantees cited the impracticality of implementing curbside recycling in their jurisdictions due to its expense.

Additionally, one respondent stated that as the success of curbside collection programs increases, costs also increase. Advertising the program leads to more people signing up for service, resulting in more expenses for containers and hauling. Because of this, ensuring adequate funding of the program is a challenge.

<u>Curbside collection prohibition at apartment complexes</u>

One grantee mentioned that many apartment complex residents are DIYers and want curbside collection offered at their residences. However, city code does not allow apartment dwellers to change their oil on the premises, so curbside collection at apartment complexes is prohibited.

<u>Inefficiency</u> of curbside recycling in rural areas

One grantee stated that curbside recycling is impractical in many rural areas due to high population dispersal.

Limited hauling capacity of curbside recycling

One grantee said that people often express a wish to leave more than one gallon of used oil for collection at a time. However, the haulers' trucks cannot accommodate a higher volume of used oil than is currently allowed.

Difficulty implementing school programs

A couple of grantees stated that they had not yet incorporated school education programs into their used oil programs. This is partially due to funding and staffing limitations. Also, many schools are busy preparing students for tests and have limited classroom time for used oil presentations. Coordinating school education programs is also difficult, according to one grantee, because the school board or superintendent must be consulted.

<u>Insufficient staff time to implement and administer the program</u>

The difficulty of allocating sufficient staff time to implement and administer a jurisdiction's used oil program was noted. All staff members dealing with used oil program activities also have other work duties to fulfill. Without a staff member dealing solely with the used oil program, it is difficult to expand existing program activities or implement new ones. This is especially true for small communities with few local government staff members. A consultant helping several sparsely populated jurisdictions implement used oil programs stated that these jurisdictions would be unwilling to meet reporting requirements without consultant help, due to their small, overworked staffs.

Grant application procedures

Three grantees found fault with the "Resolutions" segment of the grant application, as they read them. They want the Board to allow 5- and/or 10-year resolutions. Having to obtain the signatures of elected officials so frequently is time-consuming.

Grant reporting procedures—forms and rules

More specific reporting forms, such as a separate form for reporting on educational outreach, were requested by grantees. The Oil Trek form developed by a contractor to input data does not fit every used oil program well.

It was reported that grant reporting rules are sometimes overwhelming because they change periodically. However, CIWMB staff members were praised for providing updated grant agreement packages and information.

Several grantees commented that further simplification of reporting requirements would be welcome. Reporting requirements are especially burdensome for small communities with few local government staff members.

One grantee disliked the comprehensive report required at the end of each grant cycle, due to its redundancy. The information required in this comprehensive report is all included in the progress reports and annual reports submitted throughout the grant cycle.

Another grantee wanted the form recording visits to certified collection centers to be eliminated. In his opinion, visiting certified centers twice annually is excessive.

One grantee said that form sections requiring him to record the amount of oil collected from certified centers are unnecessary. CIWMB already has this information because certified centers are responsible for reporting it.

Rules Governing Grant Expenditures

One respondent said that "it would be nice" if his jurisdiction were allowed to spend grant money on food at used oil special events, such as lunch on tours of a household hazardous waste facility.

Another respondent said that rules regarding giveaways (promotional items) at times seemed arbitrary. A couple of grantees also wanted more flexibility to use grant money to buy used oil recycling promotional items.

One grantee stated that less pre-approval of grant expenditures would make implementing the UOP easier, but that he understands the need for oversight. Another grantee believed that pre-approval of advertising is a waste of time, stating that it does not result in more diversion of oil.

A couple of grantees thought rules requiring products used for the program to be composed of at least 50 percent recycled content are problematic; not all products are available with such a high proportion of recycled content. Also, it is time-consuming to find a vendor that offers a particular product with this proportion of recycled content. It would be helpful if there were an easy way for different grantees to share information regarding suitable vendors.

A couple of grantees wanted to use grant money to fund used oil messages along with stormwater and household hazardous waste messages.

One grantee wanted to use grant funds to encourage the proper use, recycling, and/or disposal of all automotive fluids and materials that wear out and are hazardous. This includes tires, antifreeze, and lubricants.

One grantee considers the cap on overhead costs, 10 percent of grant funds, to be a major obstacle. The grantee, a consulting agency helping to implement the Used Oil Program in several small jurisdictions, cannot recover full staff costs with this cap, so the jurisdictions must subsidize staff costs themselves. The grantee notes that if each of these jurisdictions implemented its own program, each would receive less than \$20,000 in grant funding and therefore would not be subject to the overhead cap. However, when these jurisdictions, due to their small staffs, joined together and hired a contractor to administer their programs, the overhead cap was suddenly enforced.

One grantee also wants permission to use grant funds to buy oil containment remediation supplies. The respondent states that this has been an issue for a number of counties needing equipment to remediate oil spills. When oil spills occur, these counties must pay to contain them out of their general funds.

Finally, one respondent stated that CIWMB should only allow grant funds to be spent on activities directly involving used oil and filter collection. He thought that grant funds should not be used for consultants, extra staff, and studies of social marketing.

Delayed Responses to Payment Requests Submitted by Certified Centers

One grantee stated that certified collection centers receive reimbursement for used oil collection about six months after they submit a payment request. This time delay discourages certified centers and makes submittal of this form less likely.

All Jurisdictions Covered Under a Grant Contract Not Held to Comparable Standards
It was suggested that the CIWMB should ensure that all jurisdictions covered within a single grant agreement (in other words, all cities in a county that has a contract) are held to comparable standards. A jurisdiction was cited as problematic, taking money from used oil funds but not actively participating in the program. This jurisdiction does no outreach, does not have any facilities accepting filters, and does not give the county its reporting data on time.

Assistance Provided by CIWMB

Some further assistance, not currently given, would be helpful, including additional resources on social marketing. One grantee wants CIWMB to provide standard graphics useful for creating print ads, as well as standard advertisements for radio and television promotion of used oil recycling. It would be helpful if CIWMB prepared these ads in other languages, also. A respondent implementing a used oil program in an agricultural area wants CIWMB to develop social marketing suggestions for rural areas. Rural areas need different types of outreach because of (a) lack of cable television, radio reception, and widely read newspapers; and (b) rural residents' apparent preference for personal contact and brief, factual flyers. A couple of respondents would also like more examples of pilot programs. In addition, one grantee wants CIWMB to provide detailed examples of successful social marketing accomplished by other jurisdictions. Jurisdictions with different population characteristics should be featured so grantees can identify jurisdictions most similar to their own for comparison.

Another grantee desires (a) a method for identifying locations of improper waste disposal and the individuals responsible for this improper disposal and (b) car registration information from the DMV for each jurisdiction for the purpose of estimating the amount of oil used and the proportion recycled. (This information can be requested directly from the DMV, but it costs money.) One respondent, in contrast to the others, wants CIWMB to emphasize social marketing less and focus on implementing curbside recycling.

Lack of an Effective Statewide Media Campaign

A celebrity media campaign to heighten the public's awareness of used oil recycling and its importance would be helpful. Also needed is a political leader to openly encourage people to recycle used oil and to emphasize the benefits of used oil recycling. Additionally, a statewide catchy slogan or tune associated with the UOP might be incorporated into a media campaign; people are more likely to notice these than the current oil drop symbol used alone. A symbol replacing the oil drop with an image more explicitly communicating used oil recycling across language barriers would also be helpful.

Lack of Emphasis on Re-Refined Oil by CIWMB

More emphasis on the promotion of re-refined oil is necessary because the purchase of re-refined oil completes the used oil recycling process. The benefits of re-refined oil need to be more thoroughly publicized.

Lack of Incorporation of all Automotive Hazardous Waste

One grantee stated that to be more effective, the UOP should incorporate all aspects of automotive waste that are hazardous and need proper disposal. These include antifreeze, lubricants, and tires, in addition to used oil and filters.

Methods Used by Grantees to Ease Burden of Block Grant Administration

Use of Consultants

One grantee uses a designated city consultant to recruit certified centers and complete certified centers' UOP paperwork. Use of the consultant decreases the administrative burdens of both the jurisdiction and of certified centers.

Use of Databases

Another jurisdiction created a database solely for the administration of the Used Oil Program. This database allows the grantee to easily handle CIWMB requirements.

Recommendations for Improvements

Convenient Collection Opportunities

Curbside collection and the presence of certified centers in convenient locations were identified by grantees as effective ways to increase used oil/filter collection because of their convenience. Residents participating in curbside collection programs are even provided with free used oil storage containers and bags for used filters. A couple of grantees noted increases in oil collection with the implementation of curbside collection. Agricultural collection facilities located near agricultural areas encourage growers and ranchers to recycle their oil and filters.

One grantee strongly believed in the effectiveness of curbside collection, stating that grantees should focus their used oil programs on this collection method. He thought this would be a more cost-effective way of promoting used oil recycling than orchestrating special events and paying for their advertisement.

Consistent Outreach

Grantees emphasize the importance of consistent outreach in many forms to encourage used oil/filter recycling. They consistently produce mailings, ads, coupons, and brochures for the public. Some also promote used oil/filter recycling on the radio, on television, and in local movie theatres. One grantee thought that radio advertising was more successful than advertising in newspapers. This is due partly to the high expense of buying sufficiently large ads in newspapers to attract attention. Also, some DIYers are likely not to subscribe to a newspaper because of financial constraints.

Outreach Through One-to-One Contact With Individuals

Grantees identified one-to-one contact with individuals at special events, their homes, and places of work as a method of outreach that, in their opinion, is very effective in encouraging them to recycle their used oil.

Outreach to Minorities

Many grantees believed that minorities are likely to be DIYers, making outreach to minority groups especially important. (Note that the SFSU study, reported elsewhere, did not find different rates of improper disposal among ethnoracial groups, although it did find that DIYer rates are higher for new immigrants, who are often minorities.)

Specific Outreach Methods Used That Grantees Believe Are Effective

- Combining the used oil recycling message with other recycling messages and messages about household hazardous waste, stormwater, etc. This can be done in presentations to schools, at local events, on websites, in recycling directories, or in promotional materials. For example, used oil recycling is sometimes promoted at local environmental events that address other environmental issues as well. Combining environmental messages might be effective for two reasons. First, people interested in learning about any type of environmental issue through ads and brochures, or at special events, are likely to be interested in used oil recycling, too. Second, those who do not change their own oil can benefit from these other recycling messages.
- Contracting with the California Conservation Corps to provide classroom presentations to all local high schools, focusing on science and autobody shop classes. The UOP's environmental message is appropriate for science classes, and presentations to autobody shop classes are important because many of these students are likely to be DIYers. Because of the age similarity between California Conservation Corps presenters and students, students identify with and listen to the presenters, making these presentations effective.

- Presentations to high schools by grantee government staff discussing the benefits of rerefined oil in order to encourage used oil recycling.
- Presentations to community college students, who seem to be more responsive than high school students to the used oil recycling message, according to one grantee.
- Holding special events targeting DIYers, where DIYers are given oil-related items such as oil
 containers, as well as information about used oil recycling and the hazards of improper
 disposal. These special events are held at certified collection centers, classic car shows, and
 race tracks. In this way, promotional items are less likely to be picked up by non-DIYers
 with little use for them.
- Advertising in a city newspaper where 75 to 80 percent of city residents reported they obtain most of their information about local government (determined in a survey). Listing certified collection center locations in the newspaper.
- Distribution of free oil storage containers at special events such as farmers' markets, at City Hall, and during curbside hauling (although not all oil storage containers distributed are necessarily used to store used oil).
- Providing grant money to an organization dealing with Latino issues so that they may better
 target the used oil recycling message to the Latino community through one-to-one contact,
 visiting the homes of individuals and the locations where they perform car maintenance, and
 conducting follow-up visits.
- Utility bill inserts that increase requests for oil storage containers, although no correlation has been established between container give-away and increased used oil collection.
- A calendar that lists used oil recycling collection centers on the back. This calendar has photos of natural areas around the jurisdiction and attempts to link (in the public's minds) used oil recycling and proper household hazardous waste disposal with healthy wildlife habitats. Public requests for this calendar increase annually.
- Performance group using music and acting to spread the message of used oil recycling to elementary school students. (The kids enjoy it, and their values are more easily shaped than those of adults.) Asking children to talk to their parents about recycling used oil.
- Producing promotional material for those speaking languages other than English, including
 print media (newspaper ads, brochures, etc.), radio, and television ads. (A couple of grantees
 strongly believed this is successful, one with statistics showing increased oil collection to
 support this; others were unsure about the success of this outreach method.)
- For agricultural communities, promoting used oil recycling at county events, such as county fairs, because these events are highly attended. Before the outreach events, the grantee advertises visiting collection centers as well as the event's used oil program booth for free storage containers. People visiting the booth often have no previous knowledge of the existence of nearby collection centers. Another advantage of having such a booth is that it helps local staff to develop community profiles for more efficient targeting of used oil messages. Finally, rural residents tend to prefer receiving information through personal contact.
- Sending packets discussing used oil recycling to lower-income areas. People living in these areas are more likely to be DIYers due to financial constraints. Also, emphasizing used oil recycling at auto parts stores in these areas.

- Radio giveaways to encourage people to visit certified collection centers. People will often visit a center to obtain a CD, raffle ticket, or coupon.
- Providing promotional items to attract young people to booths distributing information about used oil recycling. To help them remember the used oil recycling message, they are given a survey to complete regarding used oil before collecting the promotional items.

Other Outreach Methods Used by Grantees

- For agricultural communities, promoting used oil recycling in University of California agricultural publications and at farm shows in order to target growers and ranchers.
- Providing UOP promotional items such as oil storage containers, shop rags, keychains, pencils, and pens to certified collection centers The certified centers can then distribute these items to their customers.
- Providing UOP promotional items such as oil storage containers and cardboard mats with the UOP's logo to schools. Also, providing of shop rags, bags for oil filters, and flyers stating the Board's key points about the benefits of used oil recycling.
- Creation of school contests to produce used oil recycling commercials for public broadcasting.
- Promoting used oil recycling at events highly attended by particular ethnic groups to target
 the message toward these population segments. Examples of such events are Cinco de Mayo,
 the Latino History Parade, and Chinese New Year. Having bilingual representatives of the
 UOP at such events is important. However, grantees weren't sure how effective these
 activities are in increasing used oil/filter collection.
- Promoting used oil recycling at booths at general community events, such as farmer's markets and the City Hall's open house.
- Developing multi-dwelling collection pilots eventually incorporated into curbside hauling.
 People living in apartment complexes seem to be more likely to be DIYers than those living in single-family homes, so collection at apartments may encourage DIYers to recycle their oil/filters. Residents of involved apartment complexes are notified of curbside collection opportunities through signs posted in common areas and on doorhangers.
- Several grantees use grant funds to help certified collection centers pay for the hauling of
 used oil and filters. This might indirectly lead to an increase in used oil/filter collection
 because it encourages the recruitment and retention of certified centers.
- Providing a recycling directory listing certified collection centers and locations at which other products can be recycled.
- Presentations at autobody classes discussing aspects of re-refined oil, including: its quality; how it meets API standards; and agencies and businesses using re-refined oil, such as the Highway Patrol, the armed services, and the United States Postal Service.
- Providing re-refined oil as a promotional item at outreach events.
- Convincing a local Jiffy Lube to stock re-refined oil in exchange for the grantee promoting its
 purchase by paying for ads and coupons. "\$5 off" coupons are often attached to posters at
 locations such as Jiffy Lube and the lobby of City Hall. People can tear off these coupons
 and use them for discounts on the purchase of re-refined oil at Jiffy Lube.

Other Suggestions for Program Improvement

- Require certified centers to accept filters.
- Provide higher cash incentives for recycling.
- Require oil producers to indicate on labels the percentage of re-refined oil used in their products.
- Adopt measures to reduce the amount of waste generated (for example, by providing messages to the public about buying only what chemicals they need and using less of them).
- Impose higher tax on the purchase of hazardous materials to provide funding for education on waste prevention, recycling, and proper use and disposal of hazardous materials if recycling is not an option.
- Pass legislation to require all public agencies to implement use of safer alternatives to hazardous materials and recycling of materials used.
- Start program to work with businesses to ensure that they (a) provide alternative products to the public that are less hazardous, (b) educate consumers on less hazardous alternatives, and (c) provide information to consumers about where to recycle or properly dispose of hazardous materials.
- Increase or eliminate the overhead cap on block grant awards for regional or cooperative programs when small jurisdictions join together to hire a contractor to administer their programs. (If the jurisdictions implemented their programs individually, they would not be subject to the 10 percent overhead cap, due to individual grant awards of less than \$20,000.) This overhead cap makes grant funding insufficient to cover contractor staff costs, possible discouraging small jurisdictions from implementing used oil programs.
- Adopt measures to allow grantees to use grant funds to buy oil containment remediation supplies. One grantee states that this has been an issue for a number of counties needing equipment to remediate oil spills. When oil spills occur, these counties must pay to contain them with their general funds.
- Offer HHW block grant programs for counties and cities. (This idea was brought before the Board in October 2003. Insufficient funds prevented the creation of HHW block grants.)
- Withdraw the requirement that people participating in mobile agricultural collection need to have a Cal/EPA ID number. (This deters participation, since people do not want to be known as hazardous waste generators.)
- Extend advance fees for disposal of oil to HHW collection because of the expense of disposing of HHW.

Future Expectations of the State's Used Oil Program

Several respondents cited continued block grant funding as their future expectation of the Used Oil Program. Other explicitly stated expectations were:

- A celebrity media campaign.
- More emphasis on re-refined oil.
- Creation of methods to identify means of improper oil disposal.

- Creation of methods for determining percentages of different solid waste components, including oil.
- Continued support from staff.
- Continued social marketing information.
- A used oil recycling symbol that more explicitly conveys used oil recycling.
- Provision of detailed examples of successful block grant used oil programs.
- Less focus on advertising as a means to encourage oil/filter collection.

It can also be assumed that grantees' future expectations (or hopes) include the resolution of their perceived weaknesses of California's used oil program.

Certified Collection Centers and Agricultural Collection Centers Methodology

Of the 12 block grant grantee jurisdictions that completed interviews, six were selected for investigation of the perspectives of local certified and agricultural collection centers. These six jurisdictions were selected because they are reasonably representative of different California communities. They differ with regard to total population, population density, presence of agriculture, and ethnic diversity. Nine collection centers in each of the six jurisdictions were identified on CIWMB's website and called for short interviews. Some centers did not participate in the survey due to their workloads.

The original list of questions asked of certified centers was:

- 1. When did you establish the certified collection center and why?
- 2. What have been your most significant successes and challenges? (How do you measure success?)
- 3. With what other organizations do you work?
- 4. How might the State's used oil program be improved?
- 5. What are any other comments you have?

The "when" segment of Question 1 was later omitted from further interviews because respondents could not remember establishment dates. Question 3 was later omitted because it yielded no information; collection centers stated that they do not work with other organizations. Ouestions added to the list later were:

- 1. What is your position within the collection center?
- 2. What types of interactions do you have with your local government that is implementing the program?
- 3. Do you have any choice regarding how oil is reused after being collected from your center?

Findings

Reasons for Becoming Certified

Many respondents were unsure of the reasons their establishments had become certified collection centers for used oil. This could be partially due to the large number of customer service representatives interviewed. However, many managers also could not produce clear reasons for certification.

Reasons given by respondents for becoming certified collection centers included the following:

- Collecting used oil helps to prevent its improper disposal, which is environmentally damaging. Many certified centers mentioned this. A couple of respondents further noted oil dumping as a problem affecting the ocean and reservoirs.
- Collecting used oil allows one establishment to sell pollution credits to other companies, according to a customer service representative. However, the manager claimed no knowledge of this matter. When the corporate office was contacted for further information, it stated that the customer service representative's statement was false.
- An establishment's corporate office or district manager told the establishment to become certified.
- A local used oil program furnishes oil collection drums to certified centers and reimburses a
 portion of the fees paid by certified collection centers for oil hauling. These are incentives
 for an establishment to become certified. Two respondents mentioned provision of free
 collection drums.

Certified Collection Center Successes

- Prevention of improper disposal of used oil (cited most often by respondents).
- Attracting potential customers. People leave their used oil at the establishment and might stay and purchase something.
- Informing people that they can bring their used oil inside rather than leaving it outside, unchecked for contamination.
- Convenience for growers and ranchers (noted by an agricultural collection center).

Certified Collection Center Challenges

- Drop-off of used oil outside after business hours. This oil is sometimes contaminated, requiring the collection center to deal with contaminated oil hauling procedures.
- Reception of contaminated oil in general.
- Attempts by some individuals to leave larger amounts of oil for collection than are allowed.
 One respondent stated this is problematic due to lack of a forklift to handle such large oil
 volumes. Another stated that their facilities are small, and that large volumes of collected oil
 translates into large hauling costs.
- Spreading the message that people can also leave their filters at collection centers.
- Keeping customers aware that an establishment accepts used oil.

- A newly certified collection center has not yet been told how to dispose of used oil collected in a tank.
- A marina and an airport collection center stated that they do not collect much used oil. Persuasion of boaters and pilots to recycle used oil here may be necessary.

Of these, the most frequently cited challenge was reception of contaminated oil, both during and after business hours. However, many respondents stated that they rarely received contaminated oil, or that there are no challenges associated with being a certified collection center.

Interaction with Local Agency Implementing the Used Oil Program

Respondents stated that their interaction with local used oil program agencies (which are overwhelmingly local governments) consists of site visits about every two months. During these site visits, local used oil program staff members inspect certified centers and complete paperwork. Several respondents said interaction with used oil program staff was low, and that consultation with program staff is mostly only necessary when a respondent has a question.

One respondent noted that local used oil program staff members bring oil storage containers to the certified center. Coupons are distributed at a local event that allows people to visit the center and obtain a free container. This coupon system is used in order to discourage people who want to use containers for other purposes from obtaining them.

Control Over Use of Used Oil after Collection from Certified Centers

Respondents said that they have no control over the use of used oil after it is collected from their centers. One respondent noted that he might have some control over this if he researched the recycling activities of different hauling companies and selected one based on that information.

Improvement of the State's Used Oil Program

The overwhelming majority of respondents had no comments about the State's used oil program, not knowing much about it.

One respondent wants a way to recycle empty quart containers of oil. He said that the containers often do not have California logos so they cannot be recycled. He has tried to speak with someone from CIWMB about this, but was continually referred to other staff when he spoke with anyone.

Appendix C: Selected Grant Programs Offered by Other California State Agencies

Methodology

The purpose of making comparisons between grant programs in other California State agencies and those offered by the Used Oil Program was to identify best practices that might be transferable to the latter. In order to select the other programs for this purpose, inquiries were first directed to a selection of governmental and non-governmental organizations that are themselves recipients of State grants (or are professional associations representing such recipients). Examples of organizations contacted included the League of California Cities, California Society of Municipal Treasurers, California's Advocate for the Public Interest, Sierra Club, Better Business Bureau, and the International City Managers Association.

Follow-up questions were then used to further refine the selection of programs to be included in the study. Based on the responses received, the following California State agencies and their associated programs were examined more carefully: Air Quality Control Board, Caltrans, Coastal Commission, Coastal Conservancy, Department of Parks and Recreation, Department of Water Resources, Housing and Urban Development Commission, Rural Health Program, State Water Resources Control Board.

Grant programs of the Coastal Conservancy, the Department of Parks and Recreation, and the State Water Resources Control Board were ultimately selected for inclusion in the study, largely for the following reasons:

- 1. Forms are short, usually one or two pages. They are easy to understand and fill out, thus not very time-consuming.
- 2. The reimbursement method may be selected after the contract is signed.
- 3. Reporting is simple and not too time consuming.
- 4. There is flexibility in scoring the application. A grant may be approved even though the project falls a bit outside criteria.
- 5. Grantees report only after work is accomplished. The reporting method is informal and without much paperwork.
- 6. Projects are generally approved. Obtaining funding is easy.
- 7. Grantees do not need to follow a lot of steps to start projects.
- 8. Self-reporting and self-monitoring are allowed, instead of strict rules and guidelines that can slow the process.
- 9. The application process does not involve a lot of stops and delays. The grantee is trusted to follow the rules, making the process go faster and allowing projects to be completed in a timely manner.

As specified in the scope of work, the Department of Conservation's (DOC) Beverage Container Recycling Program was also included in the study because of similarities between DOC's beverage container recycling grants and the CIWMB's used oil grant program.

Our findings are summarized in the following tables, with more details presented in the ensuing narrative.

Table 12: Comparison of Grant Programs: General Information

Board, Dept., or Agency	Separate Grants Administration Unit	Number of Grants Per Manager	Block Grant (B) or Competitive Grant (C)	Eligibility	Criteria
Coastal Conservancy	Yes	Could have one huge project or several small ones. Can vary by territory. Between 6 and 20 projects.	С	Local governments other public agencies, nonprofits, private landowners.	Projects to be in line with the goals of California's Coastal Act, the San Francisco Bay Plan, or the San Francisco Bay Area Conservancy.
Dept. of Conservation (DOC): Beverage Container Recycling Program	No	Depends on who applies and gets approved per territory. Zero–10 grants per manager is typical. No sharing of responsibility between territories.	С	Government entities, businesses, schools, nonprofits, individuals.	Qualifications, need for program, goal and target, strategies, performance measures, costeffectiveness, sustainability. Preference points are given if project has three of following five components: matching funds; waste audits; partnerships with existing certified recyclers and/or beverage industry; incorporation of DOC's recycling media campaign; recycling of non-CRV materials at no cost to DOC.
DOC: Local Community Conservation Corps	No	Same as previous row.	С	Local community corps (there are 11 eligible local community corps that receive funding).	Need, proposed effectiveness, quality of proposal, budget, sustainability.
DOC: City/County Payment Program	No	Same as previous row.	В	Cities, counties.	Not applicable.

Board, Dept., or Agency	Separate Grants Administration Unit	Number of Grants Per Manager	Block Grant (B) or Competitive Grant (C)	Eligibility	Criteria
State Water Resources Control Board (SWRCB): Clean Beaches Initiative	No	Varies by workload per grant manager as well as by region. On average, 12– 15 projects per grant manager.	С	Only organizations that were listed in SB 739 (Clean Water Enforcement and Pollution Prevention Act).	Project readiness, ease of implementation, and project sustainability for next 20 years taken into account. Priority given to projects that reduce bacterial contamination at public beaches or improve coastal water quality effectively, quickly, and permanently. State laws regarding environmental justice also considered.
Dept. of Parks & Recreation. (Parks): Per Capita Bond Act Program	No	40–100 projects per project officer. Some projects sit idle for a while, with not much to do on them.	В	Cities, counties, regional park districts, regional park and openspace districts, open-space districts.	Not applicable.
Parks: Riparian and Riverine Program	No	Same as previous row.	С	Cities, counties, eligible districts (as defined), local agencies formed for park purposes, federally recognized California Indian Tribes.	Includes consideration of how well they have managed monies in the past.
CIWMB Used Oil Program: Block Grants	Yes	Average of 55 (range 45–160).	В	Local jurisdictions.	Not applicable.

Board, Dept., or Agency	Separate Grants Administration Unit	Number of Grants Per Manager	Block Grant (B) or Competitive Grant (C)	Eligibility	Criteria
CIWMB Used Oil Program: Competitive Grants	Yes	As previous row.	С	Local jurisdictions (opportunity grants), nonprofit (nonprofit grants), many public and private entities (research, testing and demonstration grants).	Need, objectives, methodology, evaluation, budget, completeness, letters of support, experience, use of re-refined oil, green procurement policy, lack of recent funding under same grant program, geographical location (may be waived).

Table 13: Comparison of Programs: Assistance, Application Process, Terms and Conditions

Board, Dept., or Agency	Assistance to Grantees	Application Process	Terms and Conditions
Coastal Conservancy	Managers get involved more in the scoping of projects and don't use RFPs. They use a rolling application process and help grantees find other sources of funds.	Grant managers work with potential grantees; managers submit recommendations to Board; grantees submit work plan and budget.	Funds must be used for pre- project feasibility studies, property acquisition, planning (for large areas or specific sites), and design, environmental review, construction, monitoring, and, in limited circumstances, maintenance.
DOC: Beverage Container Recycling Program	Questions and answers are handled on the phone and through the web.	Maximum 10-page application; four pages include cover page, budget, implementation, proposal checklist, proof of organization's status and authority.	Funds to be used for activities primarily related to CRV beverage container recycling or litter reduction.
DOC: Local Community Conservation Corps	Same as previous row.	A point system is used that examines the following items: need, goal and target, objectives, budget sustainability, performance measures.	Same as previous row.

Board, Dept., or Agency	Assistance to Grantees	Application Process	Terms and Conditions
DOC: City/County Payment Program	Same as previous row.	Two page form that asks grantee to identify collection methods and areas of focus. Application must be returned to department within 90 days of receipt of application.	Same As previous column. There are relatively few restrictions; for most part, left to discretion of grant managers and grantees.
SWRCB: Clean Beaches Initiative	Regional boards hold meetings and workshops; otherwise, mostly webbased and telephone services.	Initial completion of one-page form with information relating to lead agency, beach/coastal area, project, and timeline. If placed on "Priority List," applicant must submit: project questionnaire, detailed scope of work, detailed budget, and resolution providing an authorized representative.	The Clean Beach Initiative is funded through various propositions. Each proposition dictates certain requirements for that specific round of funding. Some propositions require matching funds, while others don't. Some propositions fund only capital outlay projects, while other proposition funds can be used for studies, monitoring, and education.
Parks: Per Capita Bond Act Program	Three to four technical workshops (application assistance) per grant cycle.	Application must include, as applicable: initial study with a description of how the grantee will comply with CEQA; evidence of adequate land tenure (lease, joint powers agreement, etc.); acquisition map showing exterior boundaries and parcel numbers (acquisition projects); project location map (city or county) with enough detail to allow a person unfamiliar with the area to locate the project; site plan (development projects); acquisition schedule; cost estimate; source of funds.	May spend up to 25 percent of the project grant amount for non-construction costs, including grants administration, plans, permits, specifications, CEQA compliance and/or acquisition documents. Per capita grant funds can only be used for capital outlay. Eighty percent can be given up-front.
Parks: Riparian and Riverine	Same as previous row.	Parks reviews application materials and sends a contract to grantee. After, grantee returns signed contract to Parks, which then returns a fully executed contract to grantee.	

Board, Dept., or Agency	Assistance to Grantees	Application Process	Terms and Conditions
CIWMB UOP: Block Grants	Workshops, annual forum, phone, printed publications, and web; also, grantees are provided with local program resources binder.	Because block grants are not competitive, local governments need only to submit a timely, completed application package and meet the program's eligibility requirements to receive a grant.	
CIWMB UOP: Competitive Grants	Same as previous row (as applicable).	Panels review applications and prepare recommendations; Special Waste Committee considers Grant Award recommendations; CIWMB Board approves award; CIWMB awards grants and mails them for grantee signature.	

Table 14: Comparison of Programs: Awards, Reporting, Recycled-Content Certification, Manager Site Visits

Board, Dept., or Agency	Awards Made	Reporting	Recycled-Content Certification Required	Managers Encouraged to Visit On-Site
Coastal Conservancy	Varies yearly. Over 600 total.	Grantees must submit a progress update with every invoice for reimbursement they submit, which is generally monthly.	No	Several times per project.
DOC: Beverage Container Recycling Program	11-65 per year, \$500,000.	Monthly status report; final report.	No	Initial site visit and final site visit.
DOC: Local Community Conservation Corps	Approximately 38.	Quarterly program status reports, quarterly reports on actual expenditures of grant funds and anticipated monthly expenditures for the balance of the	No	Initial site visit and final site visit.

Board, Dept., or Agency	Awards Made	Reporting	Recycled-Content Certification Required	Managers Encouraged to Visit On-Site
		fiscal year, and a final report.		
DOC: City/County Payment Program	Approximately 500 annually.	Brief project evaluation from grantee at end of grant cycle.	No	Same as previous row.
State Water Resources Control Board: Clean Beach Initiative	Approximately 40 per year, \$31.7 million (total).	Quarterly reports that describe activities, problems, successes, milestones. Quality Assurance Project Plans (QAPP) for water quality monitoring must also be submitted.	No	Only as needed. Travel budgets are restricted. Final site inspection is typical.
Parks: Per Capita Bond Act Program	Changes yearly, approx. 560 per year.	There are no reporting requirements other than financial. There are no montly/quarterly/annual reports required.	No	On-site visits are discouraged. Only at final site inspection. Competitive grants have preproject inspection.
Parks: Riparian and Riverine Program	35 in 2002.	Same as previous row.	No	Same as previous row.
CIWMB Used Oil Program (UOP): Block Grants	225 in most recent year, \$15.8 million.	Annual report.	Yes	Discouraged.
CIWMB UOP: Competitive Grants	20-30 per year	Three progress reports and a final report.	Yes	Discouraged.

Table 15: Comparison of Programs: Payments, Interest Tracking, Primary Performance Measures

Board, Dept., or Agency	Payments	Interest Tracking	Primary Performance Measure(s)	
Coastal Conservancy	Money is on a reimbursement system.	No	Grant manager must write a brief project evaluation. Will not refund projects that have had problems or have not carried out their agreement.	
DOC: Beverage Container Recycling Program	Paid in arrears, upon evidence of satisfactory progress, as determined by grant manager. DOC retains 10 percent of each grant progress payment until all tasks completed and final grant report approved.	Not applicable	Increase in volume collected; accomplishment of stated goals and targets.	
DOC: Local Community Conservation Corps	As previous row.	Not applicable	Same as previous row.	
DOC: City/County Payment Program	100 percent up-front.	No	Same as previous row.	
SWRCB: Clean Beaches Initiative	Mostly on reimbursement basis	Not applicable	Water quality monitoring to verify if the project implementation efforts were successful.	
Parks: Per Capita Bond Act Program	May request 10 percent advance, to be spent on costs such as plans, specifications, and CEQA compliance. Once CEQA completed, may request up to 80 percent of approved grant amount, either when construction has commenced, or after the construction.	Yes	Timely completion of project as specified in application. A final site inspection is conducted to assure the scope of the project has been completed.	
Parks: Riparian and	Grantee may submit payment request for a 10 percent advance	Yes	Same as previous row.	

Riverine Program	for project planning. Grantee commences work on project and may submit payment request up to 90 percent of grant amount.			
CIWMB Used Oil Program (UOP): Block Grants	Ninety percent of funds provided up-front; 10 percent withheld until final accounting; interest must be accounted for (spent or returned to Board).	Yes	Volume of oil diverted.	
UOP: Competitive Grants	Reimbursement basis with 10 percent withheld on each invoice.	Yes	Same as previous row.	

Findings

Department of Conservation

Introduction

Within the Department of Conservation, the Beverage Container Recycling program exists under the authority of the California Beverage Container Recycling and Litter Reduction Act, also known as the "Bottle Bill."²⁶. Funds are obtained from redemption payments made by distributors and other revenue sources into the California Beverage Container Recycling Fund. The Bottle Bill outlines how the monies in the fund should be appropriated.

Eligible activities under the Bottle Bill include, but are not limited to, support for new or existing curbside recycling programs, neighborhood drop-off recycling programs, public education, and litter prevention and clean up. Funding of the grant programs is through uncollected California Refund Value (CRV) on beverage containers. (www.consrv.ca.gov/DOR/)

Through interpretation of the legislation, stakeholder interest, and other factors, the Deputy Director of Recycling is the person who generally makes changes to policy as needed. The Deputy Director also directs the staff to carry out the policies.

Beverage Container Recycling City/County Annual Payment (Block Grant) Program

The goal of the project is to reach and maintain an 80 percent recycling rate for all CRV beverage containers. Currently, that rate is 58 percent. Each city is eligible to receive a minimum of \$5,000 and each county is eligible to receive a minimum of \$10,000 or an amount calculated by the department, on a per capita basis, whichever is greater. Funds must be used for activities primarily related to CRV beverage container recycling or litter reduction. (www.consrv.ca.gov/DOR/grants/index.htm)

The City/County Payment Program (block grant program) has a limited number of regulations, which gives both staff and grantees the power to make decisions on their own. The block grant program is intended to be flexible to allow local governments to use the funding to meet the needs of their districts.

Solicitation Process

For entities to receive funds, a funding request form must be filled out and returned to the department. The following items must be addressed in the funding request form:

- Planned beverage container recycling activities.
- Estimated dollar amounts for the planned activities.
- A description of planned accomplishment stated as a measurable target or goal.
- An explanation of how the effectiveness of the activities will be evaluated, including what data and/or information will be used to measure success.
- A brief description of the measurable outcomes achieved through implementation of previous years' activities funded by the City/County Payment Program.
- Information on whether or not the city or county prohibited the siting of a supermarket site, caused a supermarket site to close its business, and/or adopted a land use policy that restricts or prohibits the siting of a supermarket site within its jurisdiction.
- Self-certification of the total dollars spent on the previous fiscal year's activities.

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²⁶ Chapter 1290, Statutes of 1996 (Margolin, AB 2020)

Reporting Requirements and Award Process

The Department of Conservation authorizes payments to each approved city or county. The approved funding request form is forwarded to the State Controller's Office for payment within 30 days. One hundred percent of the funds can be disbursed up front.

Evaluation Process and Performance Measures

At the end of the grant cycle, the grant manager analyzes how much volume was being collected compared to how much is currently being collected. Questions asked during this process might be—How much of an increase has there been in total volume collected because of the program's efforts? Did the grantee accomplish the goals and targets stated in the application? The program determines overall state recycling rates from shipping reports from recyclers that include total volumes and the amount of redemption value paid out. These figures are then compared to total beverage container sales in the state. This comparison gives the Department of Conservation an estimate of the total amount recycled.

Competitive Programs: Beverage Container Recycling and Local Community Conservation Corps

(http://web.archive.org/web/20030408112917/http://www.consrv.ca.gov/DOR/grants/grant_seeke_rs/Images_files/Solicitation10302.pdf [2002/2003 and 2003/2004 Beverage Container Recycling Grant Solicitation])

Solicitation Process

The project application requires a five-page project description and four separate one-page attachments. The following information provides a summary of the requirements for the project description.

- Qualifications of the Organization.
- Project Need.
- Goal and Target—Focuses on what will be accomplished and specifics to be achieved.
- Objectives—Strategies that the agency will employ to accomplish its goals.
- Performance Measures—What methods will be used to collect data and what data will be analyzed to accomplish the goals.
- Cost-Effectiveness—Mathematically compare the estimated volume of CRV beverage containers to be collected to the dollar amount of grant funding requested.
- Sustainability—A detailed summary must be provided of the commitment, efforts, and resources that will ensure ongoing operation, data collection, and evaluation after grant funding is terminated.
- Diagrams/Visual Aids—Applicant should provide maps of proposed locations or service areas as well as samples of promotional materials.

Also to be included in the application:

- 1. Proposal cover page that provides general information about the organization.
- 2. Budget page and a narrative explanation that justifies each line item.
- 3. Implementation schedule that provides a detailed listing of each major milestone from project inception to completion with target dates at which progress can be measured.
- 4. Proof of organizational status and authority.

Review Process and Criteria

The grant program scores the proposals based on strengths of the following components and their corresponding percentages:

- *Need* (20 percent).
- Proposed Effectiveness (20 percent). Project goal is clearly presented and includes relevant strategies for achieving the goal. A clear description of the data to be collected, by whom, how, at what frequency, and how it will be analyzed to evaluate achievement of the goal included. The project is innovative and will provide data about new methods to increase beverage container recycling rates.
- Quality of Proposal (20 percent). The project is well planned and the description succinctly and clearly defines the tasks to be performed from beginning to end and the resources required. The estimated volume of beverage containers to be collected is supported by documented data. The implementation schedule lists major milestones at which time the Department of Conservation can evaluate progress.
- *Budget* (15 percent). All project costs are identified and reasonable, and line items are clearly justified.
- Sustainability (15 percent).
- *Preference Points* (5 percent). The project incorporates at least three of the following five components: (1) matching funds (not provided by the Department of Conservation); (2) waste audits; (3) partnerships with existing certified recyclers and/or the beverage industry; (4) incorporation of the Department of Conservation's recycling media campaign; and (5) recycling of non-CRV materials at no cost to the department.

The score from the evaluation committee includes a recommended funding level for each proposal.

Payment Process

All expenses incurred by the grantee are reimbursed in arrears, based on actual costs, and require compliance with the grant agreement. Advance payments of grant funds are not allowed.

Evaluation Methods

The Department of Conservation retains 10 percent of each grant progress payment until all tasks outlined in the grant agreement are completed. Final payment of the withheld funds is made only after approval of a final grant report.

Candidates for Best Practices

Areas of Focus

Each year there is a different focus area to concentrate collection efforts. Currently, focus areas are large venues such as ballparks and sports event stadiums. Community and tourist events such as street fairs and farmer's markets are also targeted. Past efforts have focused on single types of containers such as water and beer bottles. The focus areas are intended to stimulate new ideas on how to target different types of recyclable containers and new places to collect recyclables.

Timelines

Another policy of the program is that the time from request for proposals to application submittal is four months. This period allows for agencies to gather all required information, which can be very time-consuming, before submitting a proposal.

Administrative Costs

Another way that the agency exhibits flexibility is that competitive grant programs do not place limitations on administrative costs. The percentage of administrative costs is taken into consideration when scoring the competitive proposals; however, there is no stated limitation.

Paperwork

A limited amount of paperwork was noted in interviews by both staff and grantees as a program attribute. The regulations dictate the amount of paperwork required by grantees. The City/County Payment Program requires a simple two-page application form and makes the initial process of receiving funds easy. It allocates 100 percent of the designated funds up front, and requires a brief project evaluation from the grantee at the end of the grant cycle for the block grant. The competitive grant proposals are limited to no more than five written pages. See "Solicitation Process" above for required information for proposals. Quarterly reports are required for competitive grants, generally submitted with invoices.

State Water Resources Control Board

Introduction

There are 12 nine-member regional water quality boards and 1 five-member State-level board. Regional boards each have their own grant programs and policy is implemented at the regional board level. The State board decides how funding should be allocated to each of the regional boards.

The application process varies by grant program and the proposition funding it. Most programs involve a short request-for-proposal period, sometimes only three weeks. Generally, staff review applications and the best 50 are placed on a priority list. Occasionally, the projects are "hand-selected" by the Legislature, such as those supporting the 2001 Proposition 13 Clean Beaches Initiative. There is no point system, so there is a high degree of subjectivity when reviewing applications. Management and task forces set criteria for proposal review. The 50 applications placed on the priority list then compete for the existing funding on a first come, first serve basis. (www.swrcb.ca.gov/cwphome/beaches/reqeust_cbi_projects.pdf)

Clean Beaches Initiative

The Clean Beaches Initiative was designed to help reduce bacterial contamination at public beaches and improve coastal water quality. The goal of the initiative is to reduce health risks and increase the public's access to clean beaches. (www.swrcb.ca.gov/cwphome/beaches/)

The Clean Beaches Initiative is funded through various voter-approved propositions. Each proposition dictates certain requirements for that specific round of funding. For example, some projects are hand-selected by the Legislature, while others go though a more traditional review process. Some propositions require matching funds, while others don't. Some propositions fund only capital outlay projects, while other proposition funds can be used for studies, monitoring, and education.

Solicitation Process

For Proposition 13, the projects were "hand selected" by the Legislature. For Proposition 40 (California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Act of 2002), a 15-member advisory group reviews the applications and selects projects based on how the project will directly meet the goals of the program.

Review and Award Process

The review process is subjective. There is no point system or structured scoring system in the process. Project readiness, ease of implementation, and project sustainability for the next 20 years are important criteria. Funding is on a reimbursement basis. A summary sheet of expenditures is submitted with monthly or quarterly status reports.

Reporting Requirements

Quarterly reports are required to be submitted to the grant manager, each of which includes a brief introduction to the report and a summary of activities. A brief description of milestones, products, meetings and modifications completed, and problems and issues encountered during the reporting period are to be included in the summary of activities. The sizes of the reports varies depending upon the type of project.

Evaluation and Performance Measures

Baseline water quality data for all rivers, watersheds, estuaries, and beaches that meet the requirements for a given program must be provided. During and after project completion, it is required that the grantee conduct water quality monitoring to assess the success of the project implementation efforts.

Candidates for "Best Practices"

Paperwork

The SWRCB has many different types of grant programs with different goals and criteria. To help streamline the application process, they have combined eight different applications into one. This application asks general information about the agency, its project, and its goals. The staff then determines which grant program the applicant is best suited to and continues to work with them closely to develop a proposal for the appropriate grant program.

Administrative Costs

There are no pre-specified requirements or limits. Applicants propose a rate that is considered as part of the overall budget.

Cost-Effectiveness

Applications are generally approved and funding granted based on need. Projects addressing worst conditions and with the most potential for mitigation and cleanup have the best chance of getting funded. The SWRCB attempts to fund projects where the money will make the largest impact.

Customer Service

In a similar manner to other State agencies reviewed, the regional boards hold regular meetings and workshops to accomplish three things.

- 1. To notify the public of upcoming funding.
- 2. To train staff in assisting the grantees.
- 3. To assist grantees with questions and applications.

Distribution of Funds

Appropriating funds quickly to grantees was mentioned as an attribute of the agency. With many of the grant programs, there is a time period written in the legislation that determines how quickly funds must be disbursed after a contract is signed. Project officers noted that they believe that due to this practice, projects are completed more quickly.

Grant Evaluation System

For many of the grant programs, there is a "two-tiered approach." The first tier is a two-to five-page concept proposal that provides a summary of the project. The second tier is a full proposal that explains in detail all aspects of the project. According to one grant manager, this process saves grantee time by writing a small preliminary proposal to find out if the application has a good chance of being approved. It saves staff time by not having to review lengthy proposals that don't meet criteria or that have a poor chance of being approved.

Expansiveness of Programs

There are a wide variety of grant programs and funding sources from federal, State, and private funds. These funds can be applied to a variety of projects. Much of the funding comes from bond acts. The expansiveness of the programs is an attribute because it helps to accomplish a wide variety of tasks relating to water quality.

Coastal Conservancy

Introduction

The California Coastal Conservancy, established in 1976 under the California Coastal Act, is a State agency that uses techniques to purchase, protect, restore, and enhance coastal resources, and to provide access to the shore. The Conservancy has been funded primarily by State general obligation bonds and from the State's general fund. (www.coastalconservancy.ca.gov)

The seven-member board of the California Coastal Conservancy, appointed by the Governor and State Legislature, review grant applications and also approve or deny changes to the statutes and policies of the agency. (www.coastalconservancy.ca.gov/About/govern.htm) The staff carefully monitors the projects of their grantees to assure progress is being made.

Staff members are given much flexibility and latitude to work closely with grantees to develop proposals that have a high success rate of being approved by the board. The high level of flexibility and reduced bureaucracy are accomplished through a combination of the enabling legislation, the strategic plan, and the operating procedures. The enabling legislation broadly outlines how the agency is required to use its funds. The legislation is broad enough to allow staff to develop policies and operating procedures that attempt to minimize staff and grantee constraints. The strategic plan also outlines the parameters that affect day-to-day activities, and assists in guiding the direction of the organization. The seven-member board must approve all policies.

Solicitation Process

With a few exceptions for specific sources of funds, there is no application form for Conservancy grants. Project managers work with potential grantees and assess if their needs fall into the Conservancy's goals. If so, the project manager submits recommendations to the board on behalf of the grantee.

Review Process

The board reviews the proposal and evaluates it under general criteria. There is no point system involved when the board decides to fund a project. After the board votes to award a grant, the project manager writes a contract between the Coastal Conservancy and the grantee with the terms and conditions of the agreement. Under that contract, the grantee must submit a work plan and a budget to be approved by the Conservancy before any funds are disbursed. Although it does happen occasionally, it is uncommon for the board to reject a project recommended by a project manager. The Conservancy funds millions of dollars monthly.

Reporting Requirements

Grantees must submit a brief progress update with every invoice for reimbursement they submit, which is no more frequently than monthly.

Award Process

The program is competitive and funding is on a reimbursement basis. Funding is almost never provided up-front. Each invoice is reviewed by the a staff member in the Conservancy's accounting department, the project manager, his/her supervisor, and the executive officer to make sure it complies with the terms and conditions set out in the contract. Invoices are then subject to review again by the State controller's office in Sacramento before payment is sent to the grantee.

Project and Program Evaluation

The Conservancy gets audited each year to ensure that it is spending the money in a responsible manner and in accordance with the purposes of the bond act that provided the funding. In addition, the project manager must write a brief, two-page evaluation at the completion of the project.

Candidates for Best Practices

Paperwork

Of the State agencies that were investigated, the Coastal Conservancy has the least amount of paperwork in all areas of the grant process. Their application process is a sharp contrast from that of the Used Oil Program's. With a few exceptions for specific sources of funds, there is no application form to fill out with the Coastal Conservancy when applying for competitive grants. Grantees must submit a brief progress update with every invoice for reimbursement they submit, which is no more frequently than monthly.

Accountability

Accountability is established in several areas. First, funding is normally on a reimbursement basis only. Each invoice is reviewed by the a staff member in the Conservancy's accounting department, the project manager, his/her supervisor, and the executive officer to make sure it complies with the terms and conditions set out in the contract. Invoices are then reviewed again by the State controller's office in Sacramento before payment is sent to the grantee. Secondly, grantees must submit a brief progress update with every invoice for reimbursement they submit. Finally, the project manager must write a brief, two- page evaluation at the completion of the project.

Timelines

Grant applications are received on a rolling basis, which eliminates deadlines and avoids heavy workload periods for staff.

Department of Parks and Recreation

Introduction

The mission of the Department of Parks and Recreation is to "provide for the health, inspiration and education of the people of California by helping to preserve the state's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high-quality outdoor recreation." (www.parks.ca.gov/default.asp?page_id=91)

According to the 2001 Strategic Plan for the Department of Parks and Recreation (www.parks.ca.gov/pages/91/files/seven01.pdf), the core programs of the department focus on the following:

Resource Protection

- Education/Interpretation
- Facilities
- Public Safety
- Recreation

Block Grant Program

The Per Capita Program obtains funding through various bond acts such as the Safe Neighborhood Parks, Clean Water, Clean Air, and Coastal Protection Bond Act of 2000. The 2000 Bond Act was intended to revive State stewardship of natural and cultural resources by investing in neighborhood and state parks, coastal beaches, scenic areas, and promoting clean water protection.

The monies from bonds issued and sold are deposited into the Safe Neighborhood Parks, Clean Water, Clean Air, and Coastal Protection Bond Act of 2000 (Villaraigosa-Keeley Act)²⁷ Bond Fund. (www.parks.ca.gov/pages/1008/files/PerCapitaFinal.doc). The money in the fund is available for appropriation by the Legislature for parks and recreation improvement projects.

Project Eligibility Criteria

(www.parks.ca.gov/pages/1008/files/PerCapitaFinal.doc)

Funding is appropriated primarily for projects that accomplish one or all of the following:

- Rehabilitate facilities at existing local parks, which will allow the parks to be more efficiently managed and will reduce operational costs.
- Develop facilities that promote positive alternatives for youth and that promote cooperation between local park and recreational service providers and youth-serving nonprofit organizations.
- Promote family-oriented recreation, including art activities.
- Provide for open, safe, and accessible local park lands, facilities, and botanical gardens.

Terms and Conditions

The grantee may spend up to 25 percent of the project grant amount for non-construction costs, including grants administration, plans, permits, specifications, California Environmental Quality Act (CEQA) compliance and/or acquisition documents. Prior to commencement of construction or acquisition, the grantee must complete the CEQA process and provide documentation. All recipients of funding from the 2000 Bond Act shall post signs acknowledging the source of the funds.

Grant Process

1. The applicant submits an authorizing resolution to the department.

- The department reviews the resolution and sends a contract to the applicant for signature.
- The applicant returns the signed contract to the department.
- The department returns a fully executed contract to the grantee.
- 5. The grantee submits individual project application(s) to the department.

²⁷ Chapter 461, Statutes of 1999 (Villaraigosa and Keeley, AB 18)

- 6. The department reviews the application materials and sends a letter of approval to the grantee or requests additional information.
- 7. The grantee may request a 10 percent advance of the project grant amount as specified in the approved application to be spent on costs such as plans, specifications, and CEQA compliance.
- 8. Once CEQA requirements have been complied with, the grantee commences work on the project, and may request up to 80 percent of the project grant amount, as specified in the approved application, either when construction has commenced, or after the construction contract is awarded, and the grantee has issued a Notice to Proceed.
- 9. The grantee posts 2000 Bond Act signs, as required, acknowledging the source of funds.
- 10. The grantee completes the project and submits a project completion package.
- 11. The department project officer makes final on-site project inspection.
- 12. The department processes final payment.
- 13. The department may perform an audit of the completed project.
- Each project application must contain the following items: (www.parks.ca.gov/pages/1008/files/PerCapitaFinal.doc) Evidence of adequate land tenure (lease, joint powers agreement, etc.).
- Acquisition map showing exterior boundaries and parcel numbers. (acquisition projects)
- Project location map (city or county) with enough detail to allow a person unfamiliar with the area to locate the project.
- Site plan (development projects)
- Acquisition schedule
- Cost estimate (development projects)
- Source of funds
- Required permits. Examples include:
 - State Lands Commission
 - San Francisco Bay Conservation and Development Commission (BCDC)
 - Regional Coastal Zone Protection Commission
 - Corps of Engineers
- All leases, agreements, etc., affecting project lands or the operation and maintenance thereof.
- Photos of project site (optional).

Review and Award

There is no rigid set of rules or scoring for the Per Capita program. A contract is given out after the applicant has filled out the appropriate paperwork and if the project meets the criteria outlined above. One aspect of the scoring criteria in the competitive grants is how well they have managed monies in the past.

Reporting Requirements and Evaluation

There are no reporting requirements other than financial. There is no final report done by the project officer, but there is a final site inspection. If the scope project has been fulfilled, then that is documented and put into a database, and the remaining monies are disbursed to the grantee. There is no program analyst that reviews a database to check to make sure that all of the projects are (or are not) being completed and that the total agency money is being used to its fullest potential.

Competitive Grants: Riparian & Riverine Grant Program

Review Process

(www.parks.ca.gov/default.asp?page_id=21354)

Components of the grant process are similar for both entitlement and competitive grants except for the review and award component. Components of the project selection process are summarized as follows:

Project proposal narrative to be no more than 10 single-sided pages which briefly outlines the project goals and the specific work to be done. Applications are scored with a maximum of 100 points possible. Projects are scored based on the following criteria:

- Need for Project (40 points total).
- Community and Regional Benefits (30 points total).
 - Access and Location (10 points total).
 - Organizational Capabilities (10 points total).
 - Project Readiness (10 points total).

Award Process

- The grantee may request a 10 percent advance of the project grant amount as specified in the approved application, to be spent on costs such as plans, specifications, and CEQA compliance.
- Once CEQA has been completed, the grantee commences work on the project, and may request up to 80 percent of the project grant amount, as specified in the approved application, either when construction has commenced, or after the construction contract is awarded, and a Notice to Proceed is issued.
- For an acquisition project, The grantee may request up to 80 percent of the project grant amount as specified in the approved application or 100 percent of the actual acquisition cost, whichever is less, after the property is in escrow.
- After completion of the project, the grantee submits support materials and requests final payment.

Any interest earned from an advance shall be returned to the Department of Parks and Recreation unless the interest is used for project costs.

Candidates for Best Practices

Community Involvement

Department of Parks and Recreation competitive applications include a section requiring applicants to describe how they intend to conduct community research and investigate the needs of community members relating to the proposed project. Applicants are required to develop a sense of which projects the community wants most. Focus groups, public hearings, and surveys are common methods used to identify community needs. The survey forms and comments must be submitted with the application.

Development of Procedures

Staff and project officers work together to interpret the legislation and develop preliminary procedural guides for the grant process and applications. Public functions including focus groups, meetings, and calling upon opinion from grant experts to assist in refining the procedural guides. Typically, groups of 10–15 persons from each community are selected to assist with input to update changes. Approximately six groups are selected from a variety of geographical areas in the state. After further refinements are made, the procedural guide is made available for public comment. Finally, additional changes are made based on public comment.

Accountability

Accountability is established through a variety of means. One of the requirements in the scoring of the competitive application is how well the applicant has managed monies in the past. The project officer also makes periodic site inspections for both competitive and block grant projects to ensure progress. Additionally, projects are subject to audit for three years following the final payment of grant funding.

Customer Service

One project manager identified the quality and extensiveness of service as one of the program's attributes. Like the Used Oil Program, the Department of Parks and Recreation conducts technical workshops on a regular basis to assist grantees with applications, procedures, and questions. Workshop attendance is not mandatory, yet 30–120 persons attend each workshop on average. The workshops reduce the amount of calls that project managers receive from grantees with questions. This process allows the project managers to devote time to other duties.

Performance Measures

According to various project officers, competitive grant program effectiveness is based on a project-by-project basis. Performance measures are based on completion of the projects as specified in the application. Other indicators of success are project completion in a timely manner and if monies are being used accordingly.

Appendix D: Comparison of California State Agencies' Public Outreach Campaigns

Introduction

This section compares the CIWMB's statewide used oil recycling public outreach/education program to four other State agency public outreach programs that market behavior change.

Methodology

The methodology used to assess the chosen campaigns involved in-depth reviews of published materials and documents. The primary sources for these materials and documents were programsponsored websites that include press releases, samples of campaign materials, reports, and other informational literature. Additionally, third-party sources including articles and research documents were used to supplement program-sponsored information. A secondary source of information came from telephone interviews with representatives from the Office of Traffic Safety, the Department of Conservation, and a local Tobacco Control Section office. The interviews were used to gain further insight and clarification about issues relating to the secondary information gathered.

Selected Campaigns and Categories of Comparison

Four State agency outreach campaigns were selected for comparison to CIWMB's used oil recycling program. These campaigns include the Bottle-Can Recycling Program, the Tobacco Education Media Campaign, the Seatbelt Campaign, and the Energy Conservation & Efficiency Program. Each program takes a slightly different approach to promoting behavior change, and each offers insight regarding the CIWMB's Used Oil Program campaign.

In assessing the four campaigns, we set out to answer a number of questions. These questions would help us pinpoint areas of comparison and learning for the Used Oil Program outreach campaign. The questions posed for each campaign are outlined below.

- 1. What type(s) of behavior is the outreach program intended to change or modify? In answering this question, we specify the type of behavior influenced by the campaign. Whether the behavior is targeted for total change or partial modification influences the campaign strategies and tactics used. This is also an important component of comparison between programs. Often campaigns are seeking to change the behavior of certain groups while modifying the behavior of others. How the campaign handles this challenge is of particular interest.
- 2. What are the specific objectives of the outreach campaign? Assessment begins with identification and understanding of the outreach objectives as defined by the individual programs. Information on campaign objectives comes from existing program documentation.
- 3. What is the primary message of the campaign? We have identified the key message the program is attempting to convey through its outreach efforts.
- 4. Who is the campaign attempting to reach? We have identified the target audience for each program. This information may have come directly from the program documentation or it has been inferred from campaign materials. Any inferences will be noted as such in the program description. Often, there is more than one audience.

- 5. What are the barriers preventing the targeted behavior from taking place or limiting it? In addition to understanding the types of behavior the campaign seeks to influence, we have attempted to identify the barriers that prevent the behavior from taking place. Each program seeks to change or modify behavior by overcoming certain barriers. We attempt to identify the barriers present for each program based on existing research; however, where research was unavailable, we have made certain assumptions, which will be identified as such.
- 6. What is the program's overarching strategy to behavior change? Each program incorporates a general approach to overcoming barriers and achieving program objectives. The strategy may be explicitly stated or it may be inferred by referring to the program's use of outreach tools.
- 7. What specific tools and tactics are used to implement the chosen strategy? The specific tools and tactics used to reach the program's objectives are outlined for each campaign. Depending on the program's strategy, these tools may include incentives, punishments, commitments, communications, prompts, and others. Tactics involve the specific execution of the behavior change tools. For example, communications may involve television, radio, and billboard advertising and commitments may involve obtaining signatures of people who have agreed to recycle used oil.
- 8. What is the outreach campaign budget? By assessing the total budget for each campaign, we are better able to make comparisons across programs. Despite the fact that the Used Oil Program has significantly lower budgets than the other campaigns, there are opportunities for comparisons regarding the strategic approach and implementation of behavior change programs. Obviously, the Used Oil Program must scale its efforts to meet budgetary requirements, but we intend to pinpoint areas where use of the budget can be maximized.
- 9. Is it working? What are the results of the outreach efforts? Results are the ultimate measuring stick for any campaign. The results of each campaign are presented and compared to the program objectives.
- 10. What are the takeaways for the Used Oil Program? The final step in the campaign assessments is to provide a subjective overview of the strengths and weaknesses of each campaign and, importantly, an analysis of what the Used Oil Program can learn from the campaigns.

Findings

Campaign Summaries

Below is a brief summary of each campaign:

- 1. Department of Conservation—Bottle-Can Recycling Program

 The objective of the overall bottle-can recycling program is to reach and maintain an 80 percent recycling rate for all California Refund Value containers. The \$10 million outreach campaign, in particular, is intended to increase top-of-mind awareness of recycling issues among Californians. The bottle-can recycling program provides a natural comparison to the CIWMB's used oil recycling program because of the similarity in recycling objectives. The bottle-can recycling program began in 1987. The current campaign, "Good for the Bottle, Good for the Can," was launched approximately two years ago.
- 2. Department of Consumer Affairs—Energy Conservation & Efficiency Program

California's "Flex Your Power" Energy Conservation and Efficiency campaign began during California's energy crisis in 2000 and continued through November 2002. (San Diego Union Tribune) It was designed to encourage residents and other organizations not only to be energy-conscious, but also to take action wherever possible. The campaign was divided into conservation and efficiency efforts. The specific objective of the \$35 million energy conservation effort was to maintain average conservation levels of 8 percent. The \$8 million energy efficiency component supported the overall objectives of the conservation plan but focused exclusively on convincing Californians to purchase energy-efficient products. The energy conservation and efficiency campaign offers insight for used oil recycling concerning the use of behavior change tools that dramatically impacted both household and business users.

- 3. Department of Health Services—Tobacco Education Media Campaign

 The tobacco education campaign is designed to reduce tobacco use in California by promoting a social norm of not accepting tobacco. This \$25 million campaign seeks to communicate the dangers of tobacco use, secondhand smoke, and the tobacco industry's manipulative marketing ploys. The authorizing legislation had originally established the goal of reducing tobacco consumption by 75 percent in the State of California by the year 1999. The campaign was selected for comparison because it offers insight regarding the use of social norms and media advertising to influence behavior change.
- 4. Office of Traffic Safety— Seatbelt Campaign
 The purpose of the seatbelt campaign is twofold: First, to remind all Californians that the simple act of putting on a seatbelt saves lives, and second, to convince those who do not wear a seatbelt to do so. The objectives, which were set forth by the national government in 1996, are to achieve an 85 percent national seatbelt rate by the year 2000. California has been above the 85 percent level since 1996 through its promotion of the message that "seatbelts save lives." The \$3.9 million campaign is primarily directed toward the 8.9 percent of drivers who do not wear seatbelts. The campaign was selected for comparison because of its approach to reaching a relatively small target audience, similar to CIWMB's used oil recycling campaign.
- 5. California Integrated Waste Management Board—Used Oil Recycling
 Outreach efforts of the used oil recycling program are intended to inform and motivate the
 public to recycle used oil. The campaign currently targets "Do-It-Yourselfers" (DIYers),
 those who perform their own auto maintenance rather than using professional service stations.
 The budget for education/outreach activities in FY 2001–2002 was \$2.2 million, with
 \$750,000 going toward a statewide advertising campaign. The program relies heavily on the
 efforts of its local grantees to develop and administer outreach campaigns at the community
 level.

The following table summarizes each campaign in relation to the questions listed above. A more detailed description of each is contained in the ensuing narrative.

Table 16: Campaign Summary Table

Program	Targeted Behavior	Objective(s)	Message	Target Audience	Barriers	Strategy	Tools	Budget	Reported Results
Used Oil Recycling	Pro-recycling	Increase awareness of importance of recycling used oil.	Recycle Used Motor Oil	DIYers.	Convenience, hard-to-reach consumer	Statewide sports marketing campaign; identifying DIYers and providing outreach/ education; emphasis on grantee efforts.	Communi-cation, incentives, removal of external barriers.	Statewide: \$.5-\$1 million Grantees throughout the state: \$3-\$5 million.	1994–2001: 37 percent increase in oil recycled.
Bottle-Can Recycling	Pro-recycling	80 percent recycling rate for all CRV containers.	Recycle. It's good for the bottle. It's good for the can.	All Californians.	Convenience, knowledge, demographics.	Reach multiple targets with single message.	Education, communi-cation, prompts, social norms, removal of external barriers.	\$10 million.	2001 statewide recycling rate was 60 percent, down from 81 percent in 1995. Overall awareness of recycling doubled.
Energy Conservation	Energy efficiency and energy conserva-tion.	8 percent average conservation levels.	Flex Your Power	Residents, retailers, industrial, commercial.	Language, demographics, convenience, locus of control, forgetfulness.	High-impact educational messages.	Commit-ments, prompts, incentives, communi-cation.	\$45 million	California averted energy crisis in 2002. Achieved desired results.
Tobacco Control	Anti-tobacco use.	Reduce consumption by 75 percent.	Dangers of tobacco.	General public and ethnic communities.	Addictive, social norms, tobacco industry.	Change social norms.	Communication, remove external barriers, negative incentives.	\$25 million	Consumption by adults declined, per capita consumption declined, prevalence has not declined since 1995.
Seatbelt Campaign	Seatbelt use and occupant safety measures.	Continue pushing beyond 85 percent seatbelt use.	Seatbelts save lives.	Primarily, the 8.9 percent of drivers who do not use seatbelts and parents/caregivers of children.	Knowledge, perceptions, beliefs, convenience.	Education and enforcement, community involvement.	Communications, enforce-ment, partner-ships.	Unknown.	California has highest rate of seatbelt use in the nation, at 91.1 percent.

Campaign Assessments

Bottle-Can Recycling Campaign

(Sponsored by Department of Conservation)

The bottle-can recycling program targets pro-recycling behavior.

The bottle-can campaign targets pro-recycling behavior that involves getting all bottles and cans out of the trash and into the recycling bin.

The campaign seeks to make recycling a "top-of-mind" issue in order to reach and maintain an 80 percent recycling rate for bottles and cans.

The objective of the Department of Conservation's bottle-can recycling program is to reach and maintain an 80 percent recycling rate for all California Refund Value containers. The outreach campaign, in particular, is intended to "make beverage container recycling a 'top-of-mind' issue for Californians, thus increasing bottle and can recycling awareness, in order to get as many containers as possible out of the trash and into the recycling bin." (Department of Conservation, Dec. 2003).

The message: "It's good for the bottle. It's good for the can."

The bottle-can recycling campaign uses the slogan: "It's good for the bottle. It's good for the can." The campaign entertainingly refers to the need to save bottles and cans from being "deprived of the opportunity to live again." The underlying message somewhat sarcastically says to people that even if they're not willing to recycle for the benefits of the environment or for the cash redemptions, they should do it for the good of the bottles and cans.

Another supporting message is sent through educational efforts that attempt to teach young people how to "reduce, reuse, recycle, and close the loop." This message is delivered through Recycle Rex, the Department of Conservation's "spokesdinosaur," who visits schools and events to promote the recycling message.

The bottle-can message is intended to reach all Californians, with a special focus on "on-the-go" consumers.

The statewide media campaign is designed to reach all Californians—those who currently recycle and those who do not. At the same time, the Department recognizes individual segments of the target audience such as "on-the-go" consumers who represent a significant challenge for the outreach program and younger school-age children who are specifically targeted with an educational message.

The spokesperson for the bottle-can campaign mentioned that on-the-go consumers are becoming more of a priority for the program. (Telephone interview, Dept. of Conservation, April 2003) Upcoming campaigns will focus more heavily on curtailing anti-recycling behavior among people who eat and drink in their cars.

<u>Inconvenience</u>, <u>lack of knowledge</u>, <u>misperceptions</u>, <u>and certain demographic variables create</u> barriers to pro-recycling behavior.

The campaign seeks to overcome several barriers that may prevent pro-recycling behavior. These barriers include external and internal factors, along with demographic variables that may affect an individual's propensity to recycle. (Mayfield, 1998)

External barriers include the time, effort, and money associated with recycling. These external factors relate heavily to how convenient the recycling behavior is. Convenience is a major reason why on-the-go consumers represent a particular challenge to the behavior change efforts of the DOC.

Internal barriers include knowledge of where, what and how to recycle and knowledge of the environmental benefits of recycling. The campaign spokesperson mentioned that one of the main challenges of the program is educating people about what they can and can't recycle.

Individuals who are skeptical or have an external locus of control (sense of powerlessness) present another barrier to recycling behavior in the sense that these individuals believe that their participation in recycling won't make a difference. Demographic variables may also affect bottle-can recycling. In particular, education, income, and age are correlated with pro-recycling behavior. Individuals who are most likely to recycle are younger, well-educated, and tend to be owners of single-family homes.

The strategy involves encouragement, education, and rewards.

The Department of Conservation's strategy is based on a social marketing approach, which it defines as follows:

"Social Marketing aims to create behavioral and attitudinal change that stems from a desire to do something because it's the right thing to do, rather than from a desire for personal gain." (Dept. of Conservation, RFP Q & A's)

The outreach strategy involves reaching multiple targets with a single message that encourages recycling behavior, educates about the need to recycle, and rewards and continually reinforces pro-recycling behavior. The spokesperson for the bottle-can program mentioned that the campaign attempts to keep the recycling message fresh by consistently updating its messages.

In terms of social marketing, the campaign spokesperson referenced the anti-smoking campaign as something the bottle-can program seeks to emulate for its ability to change behavior. The spokesperson felt that while the consequences of anti-smoking are more severe than not recycling, the principles of behavior-change are the same.

A variety of community-based social marketing tools are used to reach Californians. The bottle-can campaign uses educational tools, communication, prompts, social norms, incentives, and removal of external barriers to encourage and reward recycling behavior. Each of these tools, with the exception of education, is outlined by Dougl McKenzie-Mohr and William Smith in their book on community-based social marketing.(McKenzie-Mohr and Smith, 1999) Below, we discuss how the Department of Conservation uses each tool.

Education: The program employs educational outreach that is primarily intended to reach
elementary-aged children with a message about the importance of recycling behavior.
Recycle Rex, the Department of Conservation's "spokesdinosaur," attends sporting events,
such as hockey, and participates in school outreach programs to deliver the educational
message.

At schools, Recycle Rex puts on game show-themed assemblies. According to the campaign spokesperson, Rex was created by Disney and is noted for his high quality look. The education program is "fairly widespread," according to the spokesperson, who says of Recycle Rex, "He's been all over the place talking to hundreds of thousands of kids." The spokesperson also mentioned that the rationale behind targeting elementary kids is that these kids drive much of what goes on in the household.

• *Communication:* A media campaign is used to generate awareness of recycling issues. The campaign utilizes television, radio, print, and outdoor advertising, along with public relations, news media, a website, and a *campaign in a binder* that includes all the creative materials developed for the campaign.

Perhaps the best-known components of the campaign are television spots featuring a trashtalking can that is reborn as a softball bat and an unloved plastic bottle that is reincarnated as a flotation device for a beautiful lifeguard. (Dept. of Conservation press release, 2002) The website, (www.bottlesandcans.com), continues the theme with a photo of a plastic spinning head with the headline, "Yesterday I was a \$2 bottle of water...Today I have become small plastic head man." Continuing with the same message, a print ad features a bottle of water dreaming of becoming a fleece sweatshirt. Another ad features a tough guy with a can imprinted on his forehead (implying he has just crushed the can on his head) suggesting that "even tough guys recycle."

Other campaign elements carry a similar premise and feature a variety of items that have been created using recycled bottles and cans.

The *campaign in a binder* is made available at no cost to the Department of Conservation's partners at the local level, such as city and county recycling coordinators. The purpose of the binder is to save the localities time and money associated with making creative materials on their own. According to the campaign spokesperson, many cities have the desire but not the money to promote recycling, so the *campaign in a binder* helps facilitate the process. Recently, Earth Day celebrations resulted in "a ton of calls," according to the campaign spokesperson. The Department of Conservation also indicates that the binder helps the campaign maintain a single message on recycling, rather than having a host of competing messages.

- *Prompts:* A prompt is a visual or auditory aid which reminds people to carry out an activity they might otherwise forget. Prompts can be effective in reminding people to engage in sustainable behaviors. The bottle-can program benefits from prompts such as printed "Please Recycle" reminders on bottles and cans and "Recycle" signs placed on conveniently located recycling containers. The blue recycling bins that line community neighborhoods on a weekly basis may also be considered prompts.
- Social Norms: Norms affect behavior in two distinct ways: compliance and conformity. In compliance, individuals alter their behavior to receive a reward, to provoke a favorable reaction from others, or to avoid punishment. In other words, there is a tangible consequence for the reward. The bottle-can program uses compliance norms by rewarding recyclers with a refund of 5 cents for recycled containers. Compliance tactics such as monetary incentives are generally considered effective as long as the rewards or punishments are in place. Once removed, the gains made by using the compliance tactics are often lost.
 - In contrast to compliance, conformity occurs due to individuals observing the behavior of others in order to determine how they should behave. Building conformity can have long-lasting effects on behavior. Curbside recycling programs, which include bottles, cans, and other recyclable materials, are considered effective ways to boost recycling and build a community norm around the importance of recycling because individuals see their neighbors participating in recycling and feel they should also recycle.
- Removal of External Barriers: As mentioned previously, convenience is a major barrier to recycling. The bottle-can program has been able to combat the issue of convenience by instituting curbside recycling, by encouraging communities to place recycling containers in visible and convenient locations, and by providing monetary incentives for recycling.

The outreach campaign budget is \$10 million annually, funded by unredeemed California Refund Value (CRV) deposits. Consumers pay CRV when they purchase beverages from retailers. The CRV deposits are refunded when empty containers are redeemed through local recycling centers.

All aspects of the State's beverage container recycling program are funded through money left over from unredeemed beverage containers.

Recycling awareness has increased; recycling rates have declined.

Performance measures used by the Department of Conservation include recycling awareness and recycling rates. Reports from DOC indicate general satisfaction with the outreach campaign developed by advertising agency Riester-Robb Pacific, Inc. Research conducted by the same agency indicates that since the launch of the campaign in May 2001, overall awareness of recycling has doubled. Five hundred fifty-three cities and counties have requested *campaign in a binder* materials, indicating local satisfaction with the statewide campaign. (Dept. of Conservation, RFP O & As)

On the other hand, the current recycling rate of 60 percent represents a decline of nearly 15 percent since 1999 and is well below the goal of 80 percent set by the Department of Conservation. Of course, the expansion of California's "Bottle Bill" in 2000 brought a 30 percent increase in the total number of containers eligible for CRV and under the "jurisdiction" of the bottle-can recycling program. Therefore, much of the decline in the recycling rate can be attributed to the increase in the total number of eligible containers. (www.consrv.ca.gov/dor/)

Energy Conservation & Efficiency Campaign

(Sponsored by the Public Utilities Commission. Managed by the Department of Consumer Affairs.)

California's multimillion-dollar energy campaign took place in 2001 and 2002, prompted by the state's energy crisis. The outreach efforts were divided between conservation (actions to reduce energy use) and efficiency (use of energy-efficient products), with the majority of the budget going toward conservation. The last TV, radio, and billboard commercials ran in November 2002 but the "Flex Your Power" message is still used on a limited scale. This assessment will focus primarily on the efforts that took place in 2001 and 2002.

The program seeks to influence energy efficiency and conservation.

California's "Flex Your Power" Energy Conservation and Efficiency Campaign was designed to encourage residents and other organizations not only to be energy-conscious, but also to take action wherever possible. The campaign targets behaviors that are energy-efficient and that conserve energy, such as turning off lights, buying energy efficient appliances, and reducing usage during peak hours.

The goal is to conserve 8 percent and make conservation a way of life.

The specific objective of the energy conservation outreach is to maintain average conservation levels of 8 percent. The stated long-term objective is to convince Californians that the conservation of electricity should be an integral and important part of their everyday lives. (Dept. of Consumer Affairs, 2002) The energy-efficiency component of the campaign supports those same objectives but focuses exclusively on convincing Californians to purchase energy efficient products.

The message: "Flex Your Power"

The campaign encourages consumers to "Flex Your Power" by taking measures to conserve energy. Specifically, the conservation campaign encourages consumers to use clothes washers and driers after 7 p.m. and turn off lights in unoccupied rooms. Meanwhile, the efficiency portion of the campaign encourages consumers to flex their power by purchasing energy efficient bulbs and appliances.

The campaign targets residential and business markets.

The campaign targets residents of California, retailers, and the commercial and industrial sectors. Specific efforts are also made to target diverse populations, including speakers of Spanish, Korean, Vietnamese, Mandarin, and Cantonese.

"Hard-to-Reach" consumers present a particular challenge for outreach.

Consideration of the barriers to energy-efficient behavior presents a number of factors that may influence an individual's reaction to the Flex Your Power message. One barrier is the ability of the outreach program to contact "hard-to-reach" consumers, which the California Public Utilities Commission defines as "those who do not have easy access to program information or generally do not participate in energy efficiency programs due to language, income, housing type, geographic, or home ownership barriers." (Dept. of Consumer Affairs, 2002) These barriers are defined below:

- Language: Primary language other than English.
- *Income*: Those customers who fall into the moderate-income level (income level less than 400 percent of federal poverty guideline).
- Housing type: Multi-family and mobile home tenants.
- *Geographic*:Residents of areas other than the San Francisco Bay area, San Diego area, Los Angeles Basin or Sacramento.
- *Home ownership*: Renters

Another barrier affecting energy efficiency and conservation is the convenience of leaving lights on and computers and other equipment powered up. It is simply more convenient and less time-consuming for people to leave their equipment on. The cost of purchasing energy-efficient appliances is another obvious barrier to efficiency behaviors. Other barriers may include the simple act of forgetting to turn off lights or power down workstations and the belief that an individual's actions do not make a difference.

The strategy involves high-impact informational messages.

There are two primary components of the energy campaign's strategy. The first is to develop high-impact yet informational messages that capture people's attention while providing energy-saving tips. A second and equally important part of the strategy involves the use of incentives to gain increased participation.

The program uses tools to gain commitments, to communicate with a broad audience, to reward people for participation, and to remind people to conserve. The use of commitments, incentives, communication, and prompts provides a well-rounded arsenal of tools to promote behavior change.

• Commitments: Commitments are verbal or written statements made by an individual or group committing to perform a particular behavior. (McKenzie-Mohr and Smith, 1999, p. 53) The energy conservation campaign uses commitments to secure the participation of commercial and industrial users who commit to reducing their power usage during high-demand periods. Commitments are effective because they change the way people think about themselves which affects their future behavior. So, if people commit to being energy-conscious, they begin to feel energy-conscious, and that feeling affects their future behavior to behave in an energy-conscious manner.

• *Incentives:* The energy conservation campaign uses incentives to further promote conservative and efficient behavior. The program works with retailers to promote energy-efficient appliances through rebates. Commercial and industrial sectors, which are responsible for 57 percent of peak demand in the summer months, are targeted with incentives to reduce usage during times when power supplies run low. (Reuters, 2002)

A "20:20 Program" gave generous incentives to residential and business customers that could cut their consumption during the summer months. Customers received a 20 percent rate discount if they cut power by 20 percent compared to the previous summer. Many businesses demonstrated their participation in the program by displaying signage in store windows notifying the public, "We're Flexing Our Power." The signs feature the Flex Your Power logo.

In addition, the program sponsored the "Flex Your Power" Energy Conservation Award to honor those organizations that provide leadership in implementing conservation measures.

Another type of motivational incentive is to recognize people for their efforts in performing the desired behavior. The energy conservation program used press releases to announce that residents' individual behavior had successfully resulted in decreased energy consumption. The program also released a television ad with the theme song "Power to the People," thanking Californians for helping the state through its energy crisis. (Coleman, 2002)

• Communication: The media campaign is the centerpiece of the outreach program, providing necessary exposure of the energy message to California residents. Campaign elements include television, radio, print, billboards, a website, and public relations. Certain elements of the media campaign continue today. Flex Your Power television billboard sponsorships (10-second announcements just before commercial breaks) are played on programs such as the local news and serve as a reminder to "keep flexing your power" by turning off lights in unoccupied rooms.

The Department of Consumer Affairs also partners with many other State agencies to spread the "Flex Your Power" message. For example, the logo appears on car registration envelopes. The website at www.flexyourpower.com contains separate sections for consumer, commercial, industrial, governmental, and agricultural with energy-saving tips, financial incentives, and information about other energy-saving programs. The website continues to be active today.

In addition to the general campaign, messages were done in English, Spanish, Korean, Vietnamese, Mandarin, and Cantonese.

• *Prompts:* Combating people's tendency to forget to perform energy-conserving acts, businesses and public institutions place reminder stickers with the Flex Your Power logo at computer workstations and near light switches to remind employees to turn off lights and power down computers.

The total budget is close to \$45M and is funded by the CPUC.

Thirty-five million dollars is for conservation, and \$8 million is for efficiency. The campaign was funded by grants from the California Public Utilities Commission (CPUC).

California successfully conserved energy to avoid another crisis in 2002.

In 2001, the initial year of the energy crisis, Californians used 8 percent less energy during peak hours than the year before. In 2002, the drop was 5.4 percent through August, compared with the energy use during peak hours in the same period in 2000. Both figures exceeded the Department

of Consumer Affairs' expectations. (San Diego Union Tribune, 2002) Importantly, the efforts of Californians in 2002 helped the State avoid another energy crisis. In addition, participation in the 20/20 Program was high, as one-third of all California residential and commercial users received incentives worth about \$200 million for their conservation efforts. (Chan, 2001)

Tobacco Education Media Campaign

(Sponsored by the Department of Health Services Tobacco Control Section)

There are four broad priority areas for the Tobacco Control Section (TCS) Program: reducing exposure to secondhand smoke, revealing and countering tobacco industry influence, reducing the availability of tobacco products, and providing cessation services. (A Model for Change, 1998) This assessment specifically focuses on the Tobacco Education Media Campaign (TEMC) which focuses on revealing and countering tobacco industry influence and moving communities toward increased anti-tobacco sentiment. The TEMC is one of four Tobacco Control Section program components including Local Lead Agencies (city/county health departments), Competitive Grantees (non-profit community-based organizations), and Evaluation.

The campaign seeks to promote anti-tobacco sentiment and behaviors.

The campaign is intended to prevent non-tobacco users from using tobacco in the future and to encourage tobacco-users to quit. In addition, the campaign supports the goals of TCS by encouraging communities to adopt anti-tobacco practices. An interview with the Project Director for the San Luis Obispo County Public Health Tobacco Program (Telephone interview, San Luis Obispo County, 2003) revealed that local lead agencies are required to meet the following priority areas, which are mandated by the State. The first three priorities (below) are mandatory, and the fourth is optional

- Reduce environmental tobacco smoke.
- Counter pro-tobacco influences.
- Reduce access to tobacco.
- Provide cessation services.

Until recently, the third priority area was to "reduce youth access to tobacco." Now, it has been broadened to reduce access among all populations.

The goal is to prevent tobacco-related disease and reduce tobacco use.

Authorizing legislation had originally established the objective of reducing tobacco consumption by 75 percent in the California by 1999. (www.dhs.cahwnet.gov/tobacco/) It is unknown whether this goal has since been updated or revised. The stated goal of the California Tobacco Control Program (CTCP) is to prevent tobacco-related disease and death in California by reducing tobacco use across the state. (Control Update 2002, 2002)

The messages: The tobacco industry lies, nicotine is addictive, and secondhand smoke kills. The campaign's "hard-hitting" messages are intended to communicate the dangers of tobacco use, secondhand smoke, and the tobacco industry's manipulative marketing ploys. The media campaign's key messages are that the tobacco industry lies, nicotine is addictive, and secondhand smoke kills. (*Toward a Tobacco Free California*)

While each county handles its own media campaign, the State does provide guidance on campaign messaging in order to ensure a consistent message is conveyed. Consistency of the message is a core issue, according to a Program Director in San Luis Obispo County. For this

reason, counties must submit any campaign materials using Prop. 99 funds to the State for approval.

The media campaign targets the general public and ethnic communities.

The campaign is intended to reach the general public and ethnic communities. (Request for Proposals #00-90227) The program's activities and messages are crafted to reach a broad general audience of all ages and to account for linguistic and cultural factors. Within its broad focus, specific program components address groups whose current smoking prevalence is disproportionately high (such as young adults age 18–24).

Barriers to anti-tobacco are fueled by societal norms and industry influence.

It is assumed that the barriers to decreased tobacco use include the addictive nature of tobacco products; a society that has "normalized" tobacco use; youth access to tobacco products; and the effects of multi-billion dollar campaigns by the tobacco industry to convince smokers to continued smoking and potential smokers to start.

Changing social norms is the primary strategy of the TEMC.

The strategy of the TEMC involves creating a social milieu and legal climate in which tobacco becomes less desirable, less acceptable, and less accessible. (*California Tobacco Control Update 2002*) The social norm model of change is based on the idea that the thoughts, values, and actions of individuals are tempered by their communities. Employing the social norm model, the TEMC seeks to change social norms regarding tobacco use by delivering hard-hitting, in-language, and culturally relevant messages to a diverse audience of California youth and adult consumers.

An essential aspect of this community-based approach to social norm change is the TEMC's reliance on input and feedback from locally-based partners and allies regarding program planning. Since social norms involve community-level interventions, it makes sense that the program remain in close contact with its local constituents.

The TEMC provides support to local lead agencies through a variety of resources. According to the Program Director from San Luis Obispo County, there is an extensive network of counties that collaborate on a regular basis through conferences, seminars, online databases, and informal discussions. The State also has legal and media centers to assist local agencies, in addition to a Tobacco Education Clearinghouse that provides agencies with access to a wide variety of county and State information. Also, each county is assigned a consultant at the State level to assist with its efforts.

<u>Communication and education are the primary tools used to influence social norms.</u>
The Tobacco Control Section uses communication, school-based prevention, and removal of external barriers to affect tobacco use.

• Communication: A major aspect of the communications effort involves educating people on the dangers of tobacco so that smoking is no longer considered "okay." Television, radio, billboards, transit, and print advertising are the primary media utilized by the TEMC. In 2000, the department released a total of 31 ads to counter the tobacco industry's presence in California. One current television commercial features a montage of scenes that contrast young smokers' reasons for not quitting ("I don't think I can quit.") with cancer patients' statements about their current health situations and a doctor's statements about his dying lung cancer patient ("I don't think I can operate."). The resulting message is "Quitting is hard. Not quitting is harder."

Advertisements also promote the State's toll-free information and counseling tobacco cessation service, the California Smoker's Helpline, and the Stop Tobacco Access to Kids Enforcement (STAKE) Act hotline for reporting illegal sales of tobacco products and illegally placed tobacco billboards.

On a local level, the communication efforts involve engaging nonsmokers, lawmakers, and community-based organizations to fight for restrictions on tobacco industry actions and to promote an antismoking environment in the community.

- School-Based Prevention: Separate from the TEMC, California sponsors Tobacco Use Prevention Education programs at junior high and high schools. The programs promote the same messages as the media campaign and focus on generating broad community involvement and integrating with other community-based tobacco control programs.
- Removing External Barriers: The TEMC attempts to remove external barriers that limit antitobacco behavior. Some of these external barriers include the addictive nature of tobacco, the
 tobacco industry's powerful influence, and access to tobacco products. The TEMC works to
 remove these barriers by supporting the Smoker's Helpline, which provides one-on-one
 counseling in multiple languages for smokers who want to quit; revealing the tobacco
 industry's manipulative marketing ploys; and rallying individuals to support anti-tobacco
 legislation that reduces access and increases costs to consumers of tobacco products.

The TEMC budget is approximately \$25 million annually and is funded by the cigarette tax. From the funds generated by this tax, 20 percent is earmarked for anti-tobacco education in schools and communities and about 75 percent supports the multifaceted statewide program, which includes the TEMC. (*California's Tobacco Education Campaign*, 1998)

California has experienced mixed results.

Cigarette consumption by adults has declined, with greater reductions in consumption in California than in other states. Per capita cigarette consumption declined by over 40 percent from 1988 to 1997 (A Model for Change, 1998) and that trend continues today. Progress is also evident in the decreasing percentage of smokers who smoke less than 15 cigarettes a day or smoke occasionally. In addition, in 2001, nearly three of four Californians reported to being committed to the anti-smoking cause. (California Tobacco Control Update—2002)

Despite this news, smoking prevalence has not declined after 1995. In fact, an increase in smoking prevalence among 18–24 year-olds over this time period offset the declining rates among those aged 25 and older. At the same time, the desire to quit among smokers is higher than ever. (*California Tobacco Control Update 2002*, 2002)

Seatbelt Campaign

(Sponsored by the Office of Traffic Safety)

California's seatbelt awareness campaign involves three primary areas: market research to determine groups that fall within the 8.9 percent of people who are not buckling up, a comprehensive public awareness campaign designed to reach California's diverse communities, and private sector corporate partnerships to expand the reach of the campaign.

Seatbelt use and occupant safety measures are the focus.

The campaign seeks to influence seatbelt use and occupant safety measures such as the proper use of child and infant car seats.

California's goal is to continually raise the bar.

The goal of the program is to increase compliance with the safety restraint laws, including the

correct and consistent use of infant and child safety seats. (*Office of Traffic Safety Backgrounder*) In 1996, President Clinton and Secretary of Transportation Peña set a national goal of achieving 85 percent seatbelt use by the end of the year 2000. California had already exceeded the 85 percent goal in 1996 and continues to exceed it today. When asked what the current objective is for California, a department spokesperson mentioned that the objective is "to get as many people buckled as possible." (Telephone interview, Office of Traffic Safety, 2003)

The message: "Seatbelts Save Lives."

The primary message of the seatbelt campaign is to remind all Californians that the simple act of putting on a seatbelt can save lives and to convince people who do not use seatbelts to do so. The message is that "seatbelts save lives." A second important message relates to law enforcement's commitment to ensuring compliance with the seatbelt law. The two messages combined communicate that seatbelts save lives and the use of seatbelts is mandated by law.

The primary audience is the 8.9 percent of drivers who do not use seatbelts.

The campaign is attempting to reach all Californians with a special emphasis toward the 8.9 percent of drivers who do not use seatbelts. California's diverse population makes it more challenging for the program to get its message out about safety belt and child safety seat use. New immigrants, in particular, present the greatest challenge to increasing safety belt use. ("Keeping It Clicking in California," n.d.) For this reason, the Office of Traffic Safety (OTS) takes specific measures to reach diverse groups.

<u>Lack of knowledge, misperceptions, and risky assumptions are barriers to occupant safety</u> measures.

Although no research was found to specifically address the barriers to occupant safety, we assume some of the barriers include: lack of knowledge about the seatbelt laws and about the importance of wearing a seatbelt; lack of knowledge about how to properly install a child safety seat; perception that buckling up is inconvenient, uncomfortable or inefficient; forgetting to buckle up; believing that seatbelts may "trap" occupants in the vehicle in the event of an accident; believing that the chances of getting into an accident are improbable or remote; or believing that the use of a seatbelt won't make a difference in the outcome of an accident.

The strategy combines education and enforcement.

When the safety belt awareness campaign began in 1988, it formed the California Seatbelt Task Force (CSBTF). The group consisted of the California Office of Traffic Safety, the California Highway Patrol, representatives of local law enforcement, education, the media, the medical community, automobile club, insurance companies, and traffic safety organizations. The CSBTF was charged with determining and implementing the methodology for increasing awareness of and compliance with the safety belt law. ("Keeping It Clicking in California," n.d.)

The strategy that evolved from the CSBTF was to combine education and law enforcement with a community-based approach to occupant safety issues and traffic safety problems. A large part of California's success can be attributed to the Primary Safety Belt law and Office of Traffic Safety grant programs targeting local solutions such as education programs, child safety seat distribution programs, and multi-cultural outreach programs.

The program relies heavily on community-based tools.

An interview with a representative of the Office of Traffic Safety revealed that while California's OTS does some of its own marketing through a statewide campaign, the majority of the work is done by the National Highway Traffic Safety Administration (NHTSA) and local agencies. (The NHTSA launched a significant new seatbelt campaign in May 2003.) Local agencies receive

funds from the OTS and with these funds they employ community-based tools to get the word out about seatbelt use.

<u>Communications</u>, enforcement, and partnerships are the primary outreach tools used by the Office of Traffic Safety's campaign.

• *Communications:* The mix of communications media includes public relations, TV, print, outdoor, radio, and television advertising.

The OTS has employed a sports marketing program for the past eight years. According to the campaign spokesperson, the sports marketing campaign is intended to reach men between the ages of 18 and 34 who are statistically at highest risk for DUIs and injuries due to lack of seatbelt use. In this capacity, OTS partners with sports teams across the state to promote safe driving practices to sports fans. Such teams have included the Anaheim Angels and the San Francisco Giants for baseball, and the Bakersfield Condors hockey team. The OTS also holds Traffic Safety Nights at several sporting events. OTS reports that is uses sports marketing "as a tool to reach California's diverse population where they play with their friends and families." (*Tracks* newsletter, 2003)

Joined by the California Highway Patrol and combining messages that encourage seat belt use while discouraging drinking and driving, OTS partnerships have consisted of several elements, including scoreboard messages, public address announcements, posting of information on team websites, interviews during the game, stadium events, and the distribution of promotional items.

In terms of public relations, police spokespersons appear on local TV stations to discuss the importance of properly installing child safety seats and buckling up. Officers are equipped to help citizens properly install car seats, and special days are set aside as safety seat awareness days where people are encouraged to stop by local police stations to get their car seats checked for proper installation.

In addition, virtually all local agencies in California have working agreements with their local media which provide for the timely release of information involving traffic collisions. As part of the process, law enforcement agencies have learned to use these events as a way to get the message out about the difference that proper occupant safety measures can make.

Another significant public relations effort is Child Passenger Safety Week, which takes place once a year around Valentine's Day. The OTS works with its grantees to promote the week at a local level. The point is to remind parents and caregivers to "buckle up the ones you love" in the appropriate safety belt or booster seat.

- Enforcement: The enforcement component of the seatbelt campaign involves local law enforcement agency initiatives to punish those who do not comply with the seatbelt and occupant safety laws. For example, CHP officers are trained on proper safety seat installation measures and they are trained to strictly enforce the seatbelt law. California's emphasis on constant enforcement results in the threat of immediate consequences for people who do not comply with the seatbelt law.
- Partnerships: The Office of Traffic Safety leverages partnerships with a variety of public and private organizations to extend the reaches of the campaign.

The OTS has developed strong ties with major California corporations including USAA Property & Casualty Insurance; Chevron; Kemper; Mitsubishi Motor Sales of America, Inc.; Pacific Bell; and GTE. These companies have provided in-kind support, donations, and

matching funds for public awareness and education campaigns. Media organizations and traffic reporting organizations throughout the state have also co-sponsored community-based awareness campaigns and donated space and air time for public service announcements. For example, the San Francisco 49ers promote the traffic safety message at no charge to the OTS.

Other partnerships include:

- Safe Communities coalitions, which are nontraditional traffic-related injury prevention
 groups with an emphasis on education about the importance of compliance with occupant
 safety laws.
- "Buckle Up San Diego," a cooperative agreement between the City of San Diego and the National Safety Council Chapter to promote seatbelt use. Letters and materials were sent to corporations inviting them to establish a seatbelt policy.
- Occupant protection grants to community-based organizations to promote occupant safety at the community level.
- A partnership with the Network of Employers for Traffic Safety to get the word out to employers about the importance of occupant safety.
- A partnership with the California Department of Health Services to establish a Child Passenger Safety (CPS) coordinator in 61 county health departments, children's hospitals, and day care providers.
- Child Passenger Safety laws to require all pediatric health care facilities and birthing centers to disseminate CPS information.

The budget is funded by the NHTSA.

The OTS receives funding through the National Highway Safety Act (NHWSA), which provides for federal traffic safety funds to individual states. The seatbelt campaign budget is unknown even by the representative interviewed. The spokesperson indicated that the budget varies year by year according to what is handed down at the national level. However, we know that \$3.9 million was generated in 2002 specifically to expand the efforts of the seatbelt campaign in targeting the 8.9 percent of drivers that do not use seatbelts. This money was earned through a competitive bid process sponsored by the NHTSA and was earmarked for market research, a comprehensive public awareness campaign, and private sector corporate partnerships. Meanwhile, the CHP was separately awarded \$2 million for a traffic safety campaign aimed at African Americans.

California has the highest rate of seatbelt use in the nation.

California has the highest rate of seatbelt use in the nation, at 91.1 percent. In 2001, California was the only state in the nation to earn the National Safety Council's "A" grade for seatbelt use and occupant protection compliance. In addition, as of May 2000, 348 law enforcement agencies participated in the Buckle Up America Mobilizations. This was up from only 42 agencies in 1998.

Used Oil Recycling Campaign

(Sponsored by the California Integrated Waste Management Board)

Our assessment of the used oil recycling campaign will focus on the similarities and differences between the used oil program and the four programs described above.

Types of behavior targeted:

Like the Department of Conservation's bottle-can recycling program, the used oil recycling campaign attempts to influence pro-recycling behavior. The other three campaigns target different behaviors but all five campaigns address social or environmental issues:

- *Used Oil:* Recycling behaviors to protect the waterways.
- Bottle-Can: Recycling behaviors to protect and preserve natural resources.
- *Energy Conservation*: Conservation and efficiency behaviors to avoid energy crisis and conserve natural resources.
- Anti-Smoking: Anti-smoking behaviors to eliminate substances that cause disease.
- Seatbelt: Use of seatbelts to save lives in the event of vehicle accidents.

Outreach program objectives:

The used oil recycling program seeks to increase awareness of the importance of recycling used oil. A broader goal of the program is to protect California's water resources. Similarly, the bottle-can program also targets awareness of recycling as an important objective in terms of changing behavior. Both the energy conservation and the bottle-can recycling programs seek to make the targeted behavior a regular way of life for Californians. Finally, the tobacco program and seatbelt campaign emphasize the goal of saving lives by directly changing behavior (stop smoking and wear a seatbelt).

The primary messages:

The message of the Used Oil Program is "Recycle used motor oil." This is obviously a very direct, clear message that tells the audience exactly what they are expected to do. Other campaigns take a more creative approach to delivering the message. The bottle-can recycling program entertainingly refers to the need to "save" the bottles and cans so that they can "live again." The tobacco campaign takes a hard-hitting, harsh reality approach to delivering the antitobacco message. Meanwhile, the energy conservation program highlights the power that each individual has to make a difference in California's energy crisis. The seatbelt campaign takes a slightly different approach by delivering an "end results" message that seatbelts save lives. With the end result in mind, the audience is left to make the decision to buckle up.

Target audience:

The target audience for the used oil message consists of "do-it-yourselfers" (DIYers) who change their own motor oil. These so called DIYers have been estimated to make up about 19 percent of California households. The program is specifically interested in reaching the 19 percent or so of DIYers who are thought to improperly dispose of used oil. This leaves a relatively small percentage of the population to be targeted with behavior change intervention. A similar situation exists for the seatbelt campaign, which dedicates a specific portion of its program toward

targeting the 8.9 percent of drivers that do not currently buckle up. As a result, both of these programs target a relatively small audience.

The other three campaigns (bottle-can recycling, anti-smoking, and energy conservation) target California residents as a whole, while translating general market strategies to reach ethnic populations.

Notably, the energy conservation program also targeted industrial/commercial users with its campaign efforts. The rationale that a significant contributor to energy consumption in peak hours was the business community led to the program's emphasis on commercial and industrial segments.

Barriers to targeted behaviors:

Convenience is a barrier faced by used oil recycling, bottle-can recycling, energy conservation, and seatbelt use. Each of these programs must design strategies to overcome the convenience factor associated with the targeted behavior. Another barrier faced by all campaigns is the ability to reach "hard-to-reach" consumers, which are defined slightly differently for each program. Non-English speaking populations, new immigrants from other countries, and those without access to mass media are some of the "hard-to-reach" consumers identified by the programs.

Campaign strategies:

The used oil recycling campaign employs a strategy that relies heavily on local grantees to plan, design, and execute outreach efforts. Efforts of the local grantees are supplemented by a statewide campaign that consists of sports marketing promotions and sponsorship of "Car Talk" on National Public Radio. The Department of Conservation's bottle-can program also relies on grantees to promote the program, but the program also has a significant statewide campaign that creates an "umbrella message" under which the grantees operate. Additionally, the bottle-can program supports grantees with its *campaign in a binder* that has ready-to-use advertising materials.

The Office of Traffic Safety's seatbelt campaign strategy is similar to the used oil program in that it relies heavily on community-based education efforts. However, the seatbelt campaign benefits from a national umbrella campaign that works to get the message out on a broad scale. The seatbelt program also puts a greater emphasis on enforcement combined with education.

An interesting component of the strategy for the Department of Health Service's tobacco media campaign is its reliance on localities for input into the planning of the statewide campaign. Because the overriding strategy for the anti-tobacco program involves changing social norms, input from the community level is critical to the program.

The strategy employed by the Public Utilities Commission energy conservation campaign involves an informational approach whereby consumers are provided energy-saving tips. The communications focus on providing information in an attention-getting way. Similarly, the used oil recycling messages at both the statewide and grantee level often include information about how to recycle used oil.

Marketing tools:

The used oil recycling program uses communications in the form of sports marketing contracts with minor league baseball and hockey. A variety of tactics are used to leverage the sports connection, including on-air mentions, radio commercials, game signage and giveaways. The seatbelt and bottle-can programs use a similar strategy with their sponsorships of sporting events. The bottle-can and seatbelt campaigns use the sporting venues to tie in an educational message.

Unlike the used oil program, the seatbelt campaign emphasizes public relations driven by strong media relations. Public relations efforts are centered on gaining media coverage of seatbelt and occupant safety issues.

The tobacco campaign and energy conservation, and to a lesser extent, the bottle-can recycling program, rely heavily on mass media campaigns to deliver their messages. This differs from the used oil and seatbelt campaigns which rely on more targeted means.

Bottle-can, energy conservation, anti-tobacco, and used oil programs have incentive aspects built into their campaigns. The bottle-can program rewards recyclers with the CRV refund. Energy conservation rewarded residents and businesses with rebates for energy conservation. The tobacco program's cigarette tax acts as a negative incentive for tobacco use. And finally, the used oil program offers monetary incentives for recycling behavior.

Grantees of the used oil program are provided with a guidebook to help them plan, track, and evaluate their local outreach program. The guidebook provides information on how to identify who and where the DIYers are. Similarly, the bottle-can program provides grantees with its *campaign in a binder*. The difference is that the used oil program offers guidance to help the grantees develop their own campaigns while the bottle-can program offers actual executions based on the statewide strategy. Grantees can select the executions that best meet the needs of their localities or they can develop their own materials.

Similar to the tobacco education program, the used oil program offers a clearinghouse of information for local grantees. Both programs also offer opportunities for grantees to communicate via conferences and seminars.

Budgets:

The budget for used oil education and outreach activities in FY 2001–2002 was \$2.2 million, with \$750,000 going toward a statewide advertising campaign. This budget is significantly less than the other programs, which generally have multimillion-dollar campaign budgets.

Appendix E: Selected Used Oil Programs in Other States

Introduction

The following section provides a comprehensive outline of information gathered about other state-managed used oil programs. The purpose was to make comparisons with California's used oil program in the hope of identifying best practices that might be transferable to California.

Methodology

During the initial process of determining which state programs would be best suited for a comparison with California's used oil program, it was quickly discovered that the former differ considerably, depending on each state's unique context at the time its program was established. None closely resembles the California's program in size and scope, although individual characteristics are shared by some. It was decided to look at the programs in four other states (one more than the three specified in the scope of work).

We considered a broad range of states as candidates for inclusion in the study, drawing on information posted on websites as well as input provided by contacts in government agencies (such as the U.S. Environmental Protection Agency), professional organizations (such as the NORA, An Association of Responsible Recyclers [formerly the National Oil Recyclers Association]), etc. The fact that a program had a website seemed generally to be a good indicator of the overall size and/or scope of the program within a state. The websites also provided valuable contact information. Additional information was gathered through e-mail questionnaires, phone interviews, and in-person interviews.

The four states ultimately selected for in-depth analysis are Florida, Kentucky, Maryland, and Utah. The selection was based not just on the overall success of the respective programs, but also on the extent to which they vary in distinct ways from California and each of the other states.

Contacts at the four states were each sent a questionnaire covering the topics listed below.

- Goals and objectives of the program.
- Features of the state program (or program in any jurisdiction within the state) that might be considered a best practice.
- Stakeholders.
- Education and outreach.
- Grant programs.
- Budget and funding.
- Enforcement.
- Program structure.

Responses were obtained, and subsequent follow-up conducted, by e-mail, phone, and/or inperson interviews.

Findings

Findings regarding important aspects of the four states' programs are summarized in the following table, with more details presented in the ensuing narrative.

Table 17: Used Oil Programs in Four States: Population, Implementing Agency, Goals/Objectives, Special Features

State	Population (in thousands) (from 2002 estimates, U.S. Census Bureau)	Implementing Agency	Goals and Objectives	Special Features/Best Practices
Florida	16,713	Florida Dept. of Environmental Protection (FDEP), Used Oil Program.	Implied rather than explicit for used oil, specifically (provisions appear in statutes relating more generally to environmental control).	Does not regulate used oil as hazardous waste; flexible enough to allow wide variety of management schemes; certified collection centers granted specific conditional exemptions from liability (this provision not tested to date); very user-friendly website; active member of NORA, An Association of Responsible Recyclers (formerly the National Oil Recyclers Association); citizens appear to have strong environmental ethic; initial campaign played on their consciences. Retailers selling over 500 gallons per year must display sign giving toll-free number providing location of public collection centers.
Kentucky	4,093	Kentucky Division of Waste Management (decentralized among eight branches).	Collect and recycle used oil to the maximum extent feasible; encourage voluntary collection and recycling programs.	Very decentralized program; little sharing of information; each branch of division tends to focus only on information relating to own particular function. Retailers selling over 500 gallons per year must display sign giving location of nearby collection centers.
Maryland	5,458	Maryland Environmental Service (MES)	Assist do-it- yourselfers.	\$25,000 fine used to fund rain shelters over tanks.
Utah	2,316	Utah Dept. of Environmental Quality		Dumping of used oil is illegal. Priority given to rural areas because of perceived need (more likely to change own oil; higher generation rates because of agricultural operations; lack of major chains acting as collection centers; businesses need more assistance setting up as collection centers) and political strength in Legislature. Strengths due to collection centers and

State	Population <i>(in thousands)</i> (from 2002 estimates, U.S. Census Bureau)	Implementing Agency	Goals and Objectives	Special Features/Best Practices
				letting people know about recycling used oil.
California	35,116	CIWMB	To reduce the improper disposal of used oil and to increase used oil recycling and reclaiming used oil to the greatest extent possible in order to recover valuable natural resources and to avoid damage to the environment and threats to public health.	Regulates used oil as a hazardous waste; provides 16 cent/gallon recycling incentive; certified collection centers have \$5,000 liability coverage and must display oil recycling signage; local government block and competitive grants; outreach and education; toll-free number and website provides locations of collection centers.

Table 18: Used Oil Programs in Four States: Education and Outreach, Grant Programs, Budget and Funding, Enforcement

State	Education and Outreach	Grant Programs	Budget and Funding	Enforcement
Florida	One-time \$1.5 million for statewide incentive/awareness and educational programs aimed at DIYers and school students (1988); curriculum kits introduced into every public educational institution in the state; signs, point-of-sale items, print ads, radio spots (including AM radio spots in Spanish), brochures produced for educating the public; all produced with long shelf-life; still current, valid, and in-use. Toll-free number established. \$200,000 allocated in 2001 for enhancement of educational materials.	One-time \$1 million funding for local government grants to establish collection centers (1988).	No discrete budget; two staff positions funded from trust fund; some revenues from registration and permit fees.	Enforcement of federal and state regulations (applicable to haulers, recycling facilities, etc.) by RCRA staff in six FDEP district offices.
Kentucky	Well maintained, easy-to-use website. Occasional visits to schools, public meetings, etc., when funds permit. Counties provide education aimed at adults and children, through schools, radio, newspapers, TV, brochures, fairs, contests, etc. K–6 solid waste curriculum developed by Kentucky Environmental Educational Council and others.	At one time, low interest loans were available for purchase of equipment for private collection centers.	No discrete budget; support from general fund and federal grants.	Enforcement by 50–60 state inspectors in 10 regions. Violations handed over to enforcement branch. Philosophy to try to work with collection sites rather than punishing them.
Maryland	Minimal	Minimal	\$83,000 total budget	Maryland Environmental Service is non-regulatory. Maryland Dept. of the Environment has enforcement powers.

State	Education and Outreach	Grant Programs	Budget and Funding	Enforcement
Utah	Radio, TV, papers, brochures, and public presentations are used to educate citizens and businesses about oil recycling.	Grants for public education programs, recycling incentive payments (paid to collection businesses, not DIYers), establishment of collection centers (no grants available in 2002).	Total budget \$550,000— \$600,000. Four cents per quart of lubricating oil collected at retail level on purchases in packages less than 55 gallons (with some exceptions); currently seeking fee increase to five or six cents per quart.	Local health departments (LHD) inspect collection centers twice a year and also follow up on complaints. Each LHD is paid \$10,000. State Department of Environmental Quality employees work collaboratively.
California	Localities encouraged to use portion of block grant funds for education and outreach; also statewide efforts via grants and contracts, such as videotapes distributed through Earth 911, Conservation Corps in schools, messages communicated at sports events, auto-related events, etc.	Annual block grants; biannual (or less frequent) competitive grants (opportunity; non-profit; research, testing, and demonstration).	Annual revenue around \$20 million. Four cents collected per quart of lubricating oil manufactured or imported into California.	Some collection centers inspected by localities; Southern California centers formerly inspected by State employee; haulers and recycling facilities subject to enforcement by DTSC.

Table 19: Used Oil Programs in Four States: Program Structure, Employees, DIYer Collection Centers, Progress/Success

State	Program Structure	Number of Employees	Number of Certified/Registered Collection Centers	Filters	Progress/Success
Florida	Used Oil Program, within Hazardous Waste Management Section, within Bureau of Solid & Hazardous Waste, within Division of Waste Management, within Florida Department of Environmental Protection (FDEP).	Two (program also receives help from district staff).	for DIYers Over 1,100 (at least one located in each county); auto parts stores play a major role.	Commercially generated filters banned from landfills.	Estimate: Approx 44.6 million gallons of automotive used oil collected, including 2.71 million gallons from public collection centers; approx. 27,714,000 filters (about 52 percent of total generated) collected. Most used oil burned as on-spec. fuel. Conditionally exempt small quantity generators (CESQG) are big problem; new rule to address.
Kentucky	Each of eight branches oversees a specific area of the program.		219 (not including instant oil change centers, auto parts stores, full- service stations that might also collect used oil).		Estimated gallons of used oil recycled: 12.1 million (199 4);20.3 million (2001) (latter amount may not be limited to used motor oil). Not clear that amount of DIYer used oil collected has increased.
Maryland	Administration program within Maryland Environmental Service (MES).	One (program also receives help from MES field personnel).	162 program- sponsored.		Estimated gallons of used motor oil collected: 0.03 million (1989); 0.84 million (2002).
Utah	Administered by Division of Solid and Hazardous Waste within Department of Environmental Quality.	Five at state level with 17 steering committees around state.	Almost 300.		In first year (1994), 0.1 million galls collected; increased each consecutive year; in 2002: 0.5 million galls collected.

State	Program Structure	Number of Employees	Number of Certified/Registered Collection Centers for DIYers	Filters	Progress/Success
California	Branch within Special Waste Division, within California Integrated Waste Management Board, within Cal EPA.	16.5 full-time staff and 6 part-time students.	About 2,700.	Block grant and competitive funds provided for oil filter collection.	Approximately 83.1 million gallons of lubricating oil recycled, incl. about 19.5 million galls from public collection centers.

Florida

The Florida Department of Environmental Protection has operated a statewide Used Oil Recycling Program since 1984. In 1988 the Solid Waste Management Act "substantially changed public policy toward solid waste management and used oil collection, management, transportation and recycling. New initiatives included a 5% price preference for the purchase of recycled and rerefined used oil by state and local governments, as well as some limited liability exemptions for businesses which accept used oil from the public."(Florida's Used Oil Recycling Program, 2004)

"Florida law contains several bans on the disposal of used oil. Since October 1, 1988, it has been unlawful for used oil to be discarded into sewers, drainage systems, septic tanks, surface or ground waters, watercourses, or marine waters. It cannot be mixed or commingled with solid waste to be disposed of in landfills, except for those instances wherein the disposal occurs unknowingly, or is approved by the Department of Environmental Protection (such as in the case of emergency cleanup of accidental oil spills). Used oil cannot be mixed with hazardous substances or hazardous wastes that make it unsuitable for recycling or beneficial use. It cannot be used for road oiling, dust control, weed abatement, or other similar uses that may release used oil into the environment."

Subsequent amendments made Florida law consistent with the federal used oil regulations, especially in the use of terms and definitions, and required retailers who sell over 500 gallons of oil annually to post signs displaying the state's toll free 1-800 number (which uses a voice mail system to provide the locations of all public used oil collection centers in Florida, indexed by post office ZIP code).

Chapter 62-710, Florida Administrative Code (F.A.C.), addresses used oil management and implements the provisions of state law. It establishes a program for registration, record keeping and reporting by handlers of used oil; certification of used oil transporters; and permitting of used oil processing facilities. Federal used oil management standards in Title 40 of the Code of Federal Regulations, Section 279, are adopted by reference.

"Effective June 8, 1995, commercially generated used oil filters (UOF) were banned from landfill disposal and UOF handlers were required to register with the department's Used Oil Recycling Program. Many used oil handlers now also manage UOFs to meet customer demand."

The Department of Environmental Protection is required to "submit an annual report to the Legislature which summarizes information on used oil collection and recycling, analyzes the effectiveness of the act, and makes recommendations for any necessary changes." (Florida statutes, section 403.756) The reports are based on data that have been collected during the previous calendar year.

Budget and Funding

Funding for Florida's used oil recycling program comes from a trust fund that pays for two staff positions in Tallahassee that are directly responsible for the operation of the program. However, this source might be switched to General Revenue by upcoming legislative initiatives. In addition to the trust fund, additional revenue is generated from the \$100 registration fee for used oil handlers and a \$2,000 permit fee from used oil processors collected every five years.

Program Structure

Florida's used oil recycling program is structured within the Florida Department of Environmental Protection as follows:



The structure of the program has not significantly changed over time.

Enforcement

Staffing in each of the six Florida Department of Environmental Protection district offices located throughout the state enforces compliance with Florida's used oil requirements. Penalties are determined on a case-by-case basis through the application of a penalty matrix.

Stakeholders

Ten primary stakeholders in the Florida used oil recycling program were described as important to the program. The number and variability of the stakeholders underscores the need to have a flexible management system, as mentioned previously. Overall, it appears that Florida has a greater number of stakeholders than other states represented in this study. Some of the stakeholders that are possibly unique to Florida include:

- Electric Utilities: Represented by associations in Tallahassee.
- *Trucking Companies*: Some represented by national trucking associations.
- *Phosphate Industry*: Represented by a Tallahassee-based association.
- *Major Oil Companies*: Represented by the Florida Petroleum Institute, a state chapter of the American Petroleum Institute.
- *Citizens:* Who represent themselves, through non-governmental organizations, or elected officials.
- *Used Oil Handlers*: A few are represented through NORA, An Association of Responsible Recyclers. A state association is being proposed to replace one that fell apart three years ago.
- *Generators*: Some are represented through various associations, usually related to automobile service associations.

- *IndependentAuto Service Facilities*: These are represented by the Florida Petroleum Marketers Association.
- Automobile Dealers: Some are represented by dealer associations.
- Quick-Lube Operators: Some are represented through various associations.

Education and Outreach

A one-time appropriation of \$1.5 million for statewide educational programs was approved in 1988. There is no ongoing funding for expenses related to education and outreach. The education programs developed during this time were designed to be long-lasting and are still currently being used. However, the Florida State Legislature did allocate \$200,000 to the Used Oil Recycling Program in 2001 for the purpose of enhancing the educational materials that were developed in 1988.

"The Department developed and aired 58 60-second radio announcements promoting the collection of DIY used oil at public used oil collection centers, including mention of the toll-free recycling hotline. The radio spots ran through the entire month of June 2002. According to the vendor of this service, Clear Channel Networks, the used oil recycling message gained exposure of this recycling message to approximately 2 million people per week, in 10 major metropolitan regions, through 84 radio stations." (Florida's Used Oil Recycling Program, 2004, p.3)

Grant Program

The 1988 Legislature approved a one-time appropriation of funds amounting to \$1 million for local government grants for establishing public used oil collection centers.

Outcomes

According to the annual report for calendar year 2002, the "rate of growth in the volume of used oil collected seems to at least keep pace with the population growth rate... In calendar year 2002, 150,484,128 gallons of used oil and oily wastes were reported to have been collected ... Automotive used oil and oily waste made up 32.8% of the total amount collected, including 3,045,199 gallons collected from the 1055 Public Used Oil Collection Centers reporting." (*Florida's Used Oil Recycling Program*, 2004, pp. 4–5)

The program coordinator for Florida's used oil recycling program assured us that the automotive used oil reported to have been collected from public used oil collection centers (PUOCC) came entirely from DIYers. In Florida, fast-lubes and other entities that generate oil from their own operations are prohibited from reporting this self-generated oil under the PUOCC category. The coordinator and his staff know roughly how much DIyer oil to expect from these sources and are quick to check if the numbers come in significantly higher than anticipated. They are confident that their estimate of DIYer-generated used oil is reasonably accurate.

In addition to the used oil, it is estimated that approximately 33,637,000 used oil filters were collected in 2000, accounting for about 65 percent of filters generated. Filters that were collected were mostly sent to U.S. Foundry in Dade County, Florida, which recycles filters into products such as manhole covers. The Department's authority to regulate UOFs extends only to the oil trapped within them and not to the filters themselves; thus the reporting of filter collections is optional. For this and other reasons, the data are considered less reliable for filters than for used oil.

Candidates for Best Practices

Florida has designed a program that is "flexible enough to address the wide variety of

management schemes" necessary to handle the complicated nature of used oil. Overall it appears Florida considers its statutes to be a major contributor to the overall success of the program.

Examples of the successful elements in statute are listed below.

- To avoid regulatory burden which would hinder the recycling effort, Florida does not normally regulate used oil as a hazardous waste.
- The statutory definition of "oily wastes" allows materials which would not normally be considered used oil to be brought into the regulatory framework, thereby providing proper management of such substances.
- Transporters of used oil must be certified by the Department of Environmental Protection. This requires demonstration of adequate financial assurance as well as evidence of implementation of a training program which meets Florida statute and rules.
- Voluntary participation of over 1,000 public used oil collection centers which are
 granted specific, conditional exemptions from liability in return for registering with
 the program. The Department of Protection works closely with all county used oil
 coordinators, the Florida Petroleum Council, the Florida Petroleum Marketers
 Association, and others in the oil change business to establish and maintain this
 statewide collection network.
- A maintained website that is user-friendly and contains copies of all rules, statutes, guidance memos, and other publications that are relevant to used oil. The webpage also allows the public to direct questions directly to the staff.
- Processors are well defined in the statutes and are required to be in possession of a
 used oil processing permit, which must be renewed every five years.

In addition to fundamental elements of the program such as statutes and regulations, success is also attributed to effective communication and networking. In order to stay in touch with developing trends in used oil management, staff members have regularly attended for the past 15 years conferences hosted by NORA, An Association of Responsible Recyclers (formerly National Association of Oil Recyclers).

Kentucky

Gathering information pertaining to Kentucky's used oil program proved to be significantly more difficult than with other state-managed programs. Due to the decentralized nature of the program, it was necessary to interview many different people scattered throughout different branches of the agency in order to obtain a reasonably complete picture.

Legislation

Legislation relating to the collection and recycling of used oil was first established in Kentucky in 1980. It was during this time that the General Assembly recognized the need for used oil recycling and collection, and declared that "used oil shall be collected and recycled to the maximum extent possible by means which are economically feasible and environmentally sound in order to conserve irreplaceable petroleum resources, preserve and enhance the quality of natural and human environments, and protect public health and welfare." The cabinet also encouraged the establishment of voluntary used oil collection and recycling programs and provided technical assistance to persons involved in such programs.

Retailers that sell more than 500 gallons per year of either automotive or industrial oils are required to post at the point of sale a sign no smaller than 8 ½ by 11 inches stating the location of nearby collection centers.

Registration with the cabinet is required for all used oil transporters that transport more than 500 gallons annually and all used oil recyclers that recycle more than 5,000 gallons per year. Both the transporter and recycler must submit annual reports to the cabinet that describe the activities during the calendar year. This includes such data as total amount processed, total amount collected, and total amount transferred.

There are 219 registered collection centers in 87 of the 120 counties within Kentucky. This does not include instant oil change centers, auto parts stores, and full service stations that may also collect used oil.

Program Structure

Kentucky's used oil program is a valuable case study due to the difference in the overall structure of the program as compared to those in California and many other states. The Kentucky program is decentralized among the eight branches of the Division of Waste Management. Each branch oversees a specific area of the program. The eight branches are listed below, in no particular order of importance.

Enforcement Branch: Conducts enforcement activities against violators of waste management statutes and regulations.

Field Operation Branch: Identifies and abates imminent threats to human health and the environment through inspections, technical assistance, and education.

Hazardous Waste Branch: Oversees the handling of hazardous waste "from cradle to grave;" this involves the promotion of hazardous waste minimization, hazardous waste management, and remediation of hazardous waste releases, through permitting, corrective action, registration, and reporting requirements.

Program Planning Branch: Coordinates waste management regulation development, maintains waste management records, and coordinates grants, budget, and personnel actions for the division.

Resource Conservation Branch: Provides local assistance and promotes proper management of solid waste programs in Kentucky.

Solid Waste Branch: Ensures proper solid and special waste management practices through the implementation of comprehensive permitting, monitoring, and training.

Superfund Branch: Evaluates and oversees the cleanup of illegal waste sites.

Underground Storage Tank Branch: Provides for the prevention, abatement, and control of contaminants from underground storage tanks.

Largely to facilitate the role of the 50–60 inspectors that collectively cover all of the state, attempts have been made to consolidate Kentucky's 120 counties into 10 regions for the purpose of administering the used oil program.

Notable about the decentralized structure of Kentucky's used oil program is the lack of overall information regarding used oil management that exists in each of the individual branches. Each branch tends to concentrate only on information that relates directly to that branch's particular function. This mode of operation seems similar to that of an assembly line in a factory where each

worker is only aware of his/her specific task while very little is known by these people individually about the overall program or product.

Funding

Kentucky's used oil program is currently funded from the state's general fund as well as through federal grants. The lack of a revenue-generating fee appears to be one reason for the lack of a centralized program. Integrating the program into preexisting branches is a way of attempting to reduce the overall cost of its implementation.

No funding for the establishment of private used oil collection centers is currently provided. However, low interest loans were at one time available for the purchase of equipment.

Education and Outreach

At the state level, the main form of education and outreach in the Kentucky used oil program is through a well-maintained, easy-to-use website that covers most topics that would be relevant to the average DIYer. In addition, attempts are made whenever possible to visit schools or attend public meetings to promote the recycling of used oil. However, public outreach efforts such as this are not consistent and only occur when adequate funding available is available.

Almost all counties provide some kind of solid waste education directed to adults and children, through schools, radio, newspapers, television, brochures, fairs, contests, or other similar types of activities. Funding for the implementation of the environmental education center component of the Environmental Education Master Plan has been provided to the Kentucky Environmental Education Council. The council, along with the state and local solid waste staff and educators, has developed a Kindergarten–6th grade solid waste curriculum.

The website provides information about safe used oil disposal to residents of rural communities, including five options that are available to the agricultural community:

- Option 1: Call (800) 282-0868 to determine the nearest location and phone number of a DIY Center. If the quantity is greater than five gallons, contact the center to determine the availability of service.
- Option 2: Call the service station or center where you purchase fuel and oil. These merchants will many times provide the service for their customers.
- Option 3: Work with the local agricultural cooperative to establish a used oil collection day. Collectors within the state will cooperate with local businesses to provide this service.
- Option 4: Generators could consider the acquisition of used oil furnaces for heated spaces at equipment service centers. This could be a collection point for the farming community.
- Option 5: Check with the local school bus garage. Many times these facilities accumulate oil from DIY and heat with oil fired furnaces.

Enforcement

The inspectors are responsible for oversight of all facilities relating to waste management, including the 219 public used oil collection centers. If there is a violation, the case is handed over to the enforcement branch, which tries to work with the collection center to rectify the problem rather than impose punishment. It is assumed that punishing the used oil collection centers will only make oil collection more difficult in the future.

Policies and Regulation

Regulations are generally difficult for the staff to follow and often need to be interpreted, especially when it comes to the enforcement of the program. One problem is that the inspectors

do not always have a clear definition of what constitutes a violation or what the exact definition of used oil is.

Success and Outcomes

All state and county highway garages are public collection centers and are actually the biggest collectors of used oil from the public. The state requires that each county provide an annual solid waste management report. The reports describe the type and amount of solid waste, including used oil, collected within each county. These reports suggest that the total amount of used oil recycled in Kentucky grew in most years between 1994 and 2001, starting at around 12 million gallons and ending in excess of 20 million gallons. However, the total amount of used oil recycled includes oil from all sources, not just used motor oil from DIYers.

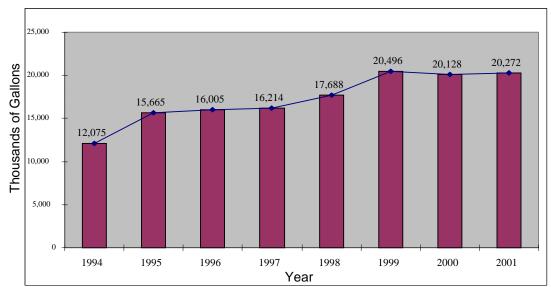


Figure 3: Amount of Used Oil Recycled in Kentucky

Maryland

Overview

The Maryland Environmental Service (MES) administers the 1978 Maryland Used Oil Recycling Act through an intergovernmental agency agreement on behalf of the Maryland Department of the Environment. "The Service is responsible for implementing a statewide program to increase the number of used oil collection facilities, provide public education and outreach programs, and maintain an information center to encourage citizens to recycle used motor oil." (Maryland Environmental Service, 2004, first page)

The MES provides used oil collection tanks, collection boxes, hardware, and signs to entities willing to collect used oil from the public. According to the MES 2002 annual report, "The Program has been successful at recruiting and maintaining donor locations for two main reasons: 1) free collection service of used motor oil; and 2) the state assumes the responsibility for disposing of any contaminated used oil." (Maryland Environmental Service, 2003, second page) One-hundred sixty-two collection sites are currently in operation (up from 44 in 1988), mostly located at solid waste, public works, and road maintenance facilities. Used oil collection sites are also provided by the state at certain state-operated marinas, and several private marinas participate in the program too. The program also collects antifreeze.

Pollution prevention, through good housekeeping and other means, is stressed to collection site operators. No contamination incidents were attributed to program affiliated tanks during 2003. In the past, some collection sites have left the program for various reasons, including the public's abuse of the dropoff locations (for example, people leaving trash and hazardous materials).

Budget and Funding

The amount budgeted by Maryland specifically for its used oil program in FY 2003–2004 was \$83,000. The majority of the program's money is spent on labor, fringe benefits, and overhead charges. Money for the program comes from several different sources. MES receives \$29,707 from the Maryland Department of the Environment through an intergovernmental agreement. MES bids out an exclusive contract for the statewide collection service. US Filter Recovery Services currently has the statewide collection contract for both used oil and antifreeze.

Overall funding for the program is considered adequate for the daily operations. However, there is not adequate funding for a significant public outreach program. When the program advertised during Earth Day events, the toll-free hotline received a record number of calls requesting information about the used oil program.

Program Structure

As previously mentioned, the MES administers the Used Oil Program on behalf of the Maryland Department of the Environment. Program oversight is the responsibility of a single MES employee, although field personnel assist in the delivery of tanks and hardware to interested sites. The employees at the collection sites are also crucial to the success of the program because they take care of the daily maintenance and monitoring of the tanks.

Enforcement

Since MES is a non-regulatory agency, all enforcement is performed by inspectors of the Maryland Department of the Environment. In its quarterly newsletter, MES reminds collection facilities about their maintenance and spill control responsibilities.

Grants

Maryland's used oil program does not normally provide grants. However, a series of 10, one-time grants is being provided from funding that was made available by the Carroll Independent Fuel Company in lieu of a fine levied by the Maryland Department of the Environment. This is an alternative approach to traditional enforcement penalties and provides revenue to improve the used oil program. A total of 10 grants, not to exceed \$2,500, have been allocated to local jurisdictions for the construction of rain shelters over used oil recycling collection tanks. There has been concern about storm water run-off pollution and non-point source pollution caused by water accumulation around used oil recycling collection tanks.

Education and Outreach

Due to a shortage of adequate funding, no explicit plan for education and outreach exists within the Maryland used oil program. However, in spite of a lack of a formal education plan, the program has undertaken successful public outreach efforts, which are discussed in this section.

With assistance from Pennzoil and US Filter Recovery Services, Maryland's used oil program sponsored "12 Hours at the Point," a 12-hour endurance sports car race in 2000. Car air fresheners and ice scrapers are also distributed at community events.

When this research was being conducted, Maryland planned to submit a paper to the NORA (NORA, An Association of Responsible Recyclers) 2003 Annual Recycling Conference, discussing its efforts to reduce non-point source pollution caused by storm water run-off around used oil collection tanks.

The program also purchased commercial radio air time for several 30-second advertising spots. Brochures entitled "Oil and Water Don't Mix" are also distributed as a form of advertising for the program.

Quarterly used oil collection reports along with public outreach support are provided to all participating county and municipal governments. Spill control and contamination prevention are encouraged through the distribution of a brochure entitled "Guideline for Program Participants" to all designated program coordinators. The brochure discusses housekeeping issues that are important for the proper management of the collection sites. While the brochures are important for helping to minimize spills and reminding collection facilities to maintain clean litter free sites, the quarterly newsletter is what really helps to maintain communication between collection locations, program management, the Maryland Department of the Environment, and the regulatory authority. In addition, the newsletter also highlights program accomplishments and keeps collection centers updated on program activities and important initiatives.

A toll-free phone line is maintained to provide information as to where and how to properly dispose of used oil. The toll-free phone line is part of the information center required by the Code of Maryland Regulations.

The program is also promoted to municipalities and counties during the Maryland Municipal League Conference and the Maryland Association of Counties Conference.

Successes and Outcome

The state claims that more than 8.2 million gallons of used oil have been collected solely from DIYers since 1988. In addition, the program has continued to collect antifreeze, collecting over 400,000 gallons since 1990. There are currently 162 program-sponsored collection locations. The amount of used oil collected has increased every year since the program's inception. Below are figures from the *Maryland Used Motor Oil Recycling Program: 2002 Annual Report* (Maryland Environmental Service, 2003, last page) showing the amounts of used oil and antifreeze collected each year, as well as the total for all of the years.

Table 20: State of Maryland Oil Collections

Year	Used Oil (gallons)
1989	34,426
1990	145,153
1991	323,408
1992	482,019
1993	507,777
1994	575,391
1995	666,869
1996	687,095
1997	742,313
1998	776,806
1999	792,776
2000	801,297
2001	804,825
2002	838,805
TOTAL	8,178,960

Utah

Information relating to Utah's used oil program and how it could relate to California's program was obtained through personal interviews (Prawl, 20022003) (Schroyer, 2003) with two key persons within Utah's program. Further information was gathered through the completion of questionnaires.

Goals and Objectives

There is no strategic plan containing explicit goals or objectives. There is simply an implied goal through the legislation to collect as much oil as possible. The method for doing this is discretionary and depends upon the current regulations.

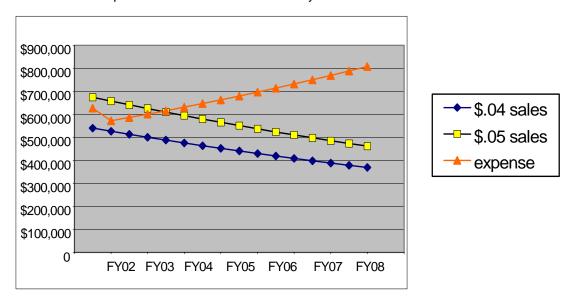
Budget and Funding

Funding for the used oil program is generated through a 4-cent fee on each quart of oil sold, as well as from general funds. The 4-cent fee is used to fund the program as well as to provide the incentive payment for DIY oil. Fiscal problems in the state have caused the legislature to suspend funding from the general fund in an attempt to help balance the budget. Without the additional funding from general funds, the current budget is approximately \$550,000. The cut in funding forced the program to cease hiring an outside consultant to conduct education and public outreach, forcing another employee in the program to take over this function to the extent feasible.

When this research was being conducted, it was considered very unlikely that funding from the general fund would ever return. A possible increase in the fee collected on oil sales, to 5 or 6 cents per quart, would allow the program to operate at its current level for about another eight years. The feasibility of persuading the legislature to increase the fee was uncertain. (The oil program has at times been considered a "feel good" program by the legislature). It was thought unlikely that the fee would be increased until 2006 at the earliest, depending on the state of the economy. Seeking to match the fee to inflation is another strategy that might be pursued. The figure below projects the current operating expenses compared to revenue generated from the 4-cent fee on the sale of oil along with the additional revenue generated by increasing the fee to 5 cents.

Figure 4: Utah's Used Oil Program Projected Revenue and Expenses

Source: Utah Department of Environmental Quality



Reduced revenue from the general fund is one of the reasons for the fact that the level of grants has diminished. Another reason is that many of the initial grants were for the set-up of collection centers, including purchasing storage tanks and other related equipment. Now that a majority of these are in place, there is less need for such grants. Grants can be distributed to either public or private entities for specific projects such as providing for a new collection center. Educational grants were also cut, due to the lack of general fund money.

Program Structure

There are currently five employees assigned to the used oil program at the state level. They are distributed among the duties of permits, inspections, regulatory aspects, and the DIY recycling program. It is the consensus among staff that the program needs another employee since the current staff is stretched rather thin. Reappointment of the contractor for education and public outreach would be helpful. In addition, another employee would help implement such recycling tactics such as "closing the loop" (possibly involving a mandate to purchase recycled oil at the state level).

Additional local effort is provided through the use of steering committees located within counties around the state. There are a total of 17 steering committees in the state, each consisting of 3 to 20 people. One of the main purposes of the steering committees is to provide direction for the state through input at the local level. Ideas for public education and outreach come from these steering committees. It is through this method that the state can gather ideas at the local level and apply them to a centralized public outreach campaign.

The steering committees meet once a year at the request of the state and are open to anyone in the community that wants to attend. It is during this time that State employees will travel to meet with the individual jurisdictions. While these steering committees are directed by the state, they are truly intended to initiate some local control over a state program. Ideally they would operate without being directly requested by the state.

Enforcement

In order to enforce compliance with the program, the Utah Department of Environmental Quality (DEQ) works in conjunction with the local health departments (LHD) throughout the state to

conduct inspections of used oil collection centers. Local health department employees conduct two inspections per year and also investigate complaints or reports of spills that are passed on to them. While local health department employees perform inspections and investigate complaints and spills, Department of Environmental Quality employees perform regular inspections. Most inspections by DEQ employees are of transporters, processors, and used oil burners. However, assistance is also provided to local health department employees to ensure that complaints, spills, and local inspections are handled properly.

A significant amount of the annual used oil budget is spent on enforcement. Yearly, \$120,000 is given to the local health departments (\$10,000 to each of 12 local LHDs) for the purpose of performing inspections. Two-thirds of the approximate \$300,000 spent on DEQ Division and Board costs is earmarked for enforcement-related activities. While this is a significant amount of the overall budget, expenditure on enforcement activities can vary each year depending upon the need.

When a problem with compliance is discovered, employees of the used oil program have found it to be more beneficial to work with the violator in an attempt to find a solution rather than simply penalizing them. Penalizing collection centers can create bad publicity for the oil program and would most likely lead to further non-compliance in the future. The most common violations occur in rural areas and result largely from bad housekeeping practices.

While the state very rarely resorts to penalizing an oil collection center for non-compliance, it will at times penalize transporters and processors for blatant violations of regulations. The rationale behind this is that transporters and processors are much larger businesses than most collection centers and are profiting off the collection of used oil much more than most local collection centers, especially if the collection centers are locally owned "Mom and Pop" operations.

Reporting Requirements (for both inspections and grants)

Yearly reports from the LHDs are compiled for the Department of Environmental Quality. The reports are then used in yearly reports submitted to the U.S. EPA. In addition, reporting requirements for any grants are very informal and are usually completed in the form of a memo outlining what was accomplished with the money. Since most grants are earmarked for a specific task with little discretion as to how the money will be spent, there is little need for extensive reporting requirements.

Grants

Grants are generally short-term and are for a specific purpose such setting up a collection center or an outreach program. Distribution of grants can occur at any time throughout the year and are decided upon when the application is received by the DEQ. There is no set amount of money that is to be distributed for a particular type of grant. Each year the specific amount of money allocated to grants varies depending on the amount of available funds. In recent years, funding for grants has significantly diminished. This is due to budget cuts, increased costs of operation, and a relatively stagnant flow of revenue from the 4-cent fee. Grants for establishing used oil collection centers in rural communities are given priority over grants for establishing centers in more urban areas for six main reasons listed below.

- People in rural areas are more likely to change their own oil partially because they have less availability to fast-lubes and other service centers.
- Rural areas also have more agricultural production, and these operations generate more oil per capita than activities by suburban residents.
- Residents in rural areas have to travel farther to find collectioncenters.

- Major chains (such as AutoZone, Checker Auto, Pep Boys, Jiffy Lube, and NAPA) that are used oil collection centers in urban and suburban areas are not normally located in rural areas.
- Businesses in rural areas may have more needs for assistance in getting set up as collection centers.
- There is a large rural influence in the Utah Legislature.

Successes and Outcome

Overall, the program appears to be successful in meeting its implied goal of collecting as much used oil as possible. Since record-keeping began in 1994, 2.5 million gallons of used oil has been accounted for through this program. In the first fiscal year of the program's operation, 123,586 gallons of used oil were reported as being collected, and the amounts have increased each consecutive year. In fiscal year 2002, 466,343 gallons were reported. There are currently almost 300 registered used oil collection centers in Utah, and this amount has been consistently increasing too. In addition, there are approximately 34 other facilities and transporters permitted, and approximately 150 complaints are investigated statewide on a yearly basis.

Candidates for Best Practices

Best practices for the Utah include a range of issues that are deemed valuable by the State of Utah as they relate to the used oil program.

For the purpose of keeping up to date on current issues relating to used oil recycling, attendance at the annual NORA conference is considered useful. However, due to budget cuts, attendance has became significantly more difficult.

Other successful components of the Utah used oil program relate to collection centers and semianuual inspections made by local health department employees which result in most collection centers meeting stated requirements. Incentive payments are only made on oil collected from DIYers, not on oil received from in-house repairs such as oil changes at an automotive repair shop.

Future efforts to promote collection centers are going to shift the focus away from incentive payments and toward the idea that operating an oil collection center can provide a valuable source of advertising. The idea is that every time customers go to an auto supply store such as Kragen, they are likely to buy something else while in the store. This potential sale is in reality much more valuable than the incentive payment of 16 cents per gallon.

Additional elements of the program that could be considered best practices are listed below:

- Permit applications are processed within 90 days of receipt.
- Complaints regarding used oil spills or illegal dumping are followed up with an on-site investigation within five working days.
- Used oil tanks at collection centers are emptied before they are full, so no DIYer is ever turned away.
- Log sheets of used oil collected are submitted at least once a year by each collection center.
- The used oil program toll-free number is in place to provide information to the public.
- Priority is given to establishing used oil collection centers in rural areas where agriculture is more common and residents have less access to oil change services and auto parts stores.

Appendix F: Deliverables Listed in Scope of Work

	Report	Appendix A	Appendix B	Appendix C	Appendix D	Appendix E
Provide a summary of the organization; planning; data collection; contracting; grant evaluation procedures; and administrative processes of the Used Oil Program.	X					
Summarize the grant administration and reporting tasks of Used Oil Program staff and grantees.	X					
Provide recommendations for streamlining the grant administration and reducing reporting by both program staff and grantees and/or identify necessary data collection methods for effective evaluation.	X					
Consolidate findings resulting from the Office of Organizational Effectiveness (OOE) program review and summarize measures and recommendations to improve the Used Oil Program.		X				
Summarize the issues and expectations of internal and external stakeholders regarding the Used Oil Program.	Х		X			
Identify inherent strengths, inefficiencies and service gaps within the Used Oil Program.	X					

	Report	Appendix A	Appendix B	Appendix C	Appendix D	Appendix E
Provide recommendations to resolve stakeholder issues and streamline and improve program efficiencies within the Grants Administration and Statewide Outreach/Analysis Units.	Х					
Recommend methods and potential legislative and/or regulatory changes to increase collections of used oil and household hazardous waste.	X					
Provide performance measures that staff can use to evaluate program success.	X					
Provide a matrix and narrative summary comparing those data variables listed above between the CIWMB used oil competitive grant programs and the entitlement and grant programs managed by four other State agencies.				X		
Provide a summary of features from the four comparative State entitlement and grant programs. Recommend features that would improve the efficiency and administration of the Used Oil Program's entitlement and competitive grant programs.	X			X		
Provide a written summary of those marketing strategies used by other state agencies to create behavior change that could be adopted by the Used Oil Program to promote used oil recycling.					Х	

	Report	Appendix A	Appendix B	Appendix C	Appendix D	Appendix E
Provide a summary of the four-state comparative study and recommendations for best management practices and program elements from the comparative study that could be adapted to improve California's used oil program.						X
Recommend changes to the Board's website that would best serve external stakeholders, including information on best management practices, instructional guides, program data, and links to other resources.	Х					

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